TIER I PERMIT RENEWAL APPLICATION AND SIGNIFICANT PERMIT MODIFICATION APPLICATION FOR

J.R. SIMPLOT COMPANY
DON SIDING PLANT
1150 WEST HIGHWAY 30
POCATELLO, IDAHO 83201

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DEPARTMENT OF ENVIRONMENTAL QUALITY
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Submitted to:

Idaho Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706

Submitted by:

Golder Associates Inc.
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Lake Oswego, Oregon 97035

Golder Associates

June 20, 2007

Golder Project No. 063-9791

ORIGINAL

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June 20, 2007

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1.0 APPLICATION SUMMARY

1.1 Introduction

J.R. Simplot Company (Simplot) owns and operates an integrated phosphate fertilizer manufacturing plant (Don Plant) in Power County near Pocatello, Idaho. The plant produces phosphoric acid, sulfuric acid, several grades of solid and liquid fertilizers, and other commercial chemical products.

1.2 Purpose

1.2.1 Tier I Renewal Application

The purpose of this application is to renew the Tier I Operating Permit. The facility is currently operating under Idaho Tier I Operating Permit Number TI-040313, which was issued on December 24, 2002 and expires on December 24, 2007. This permit was originally issued on December 24, 2002 as Permit No. 077-00006, was then reissued on April 5, 2004 as Permit No. T1-9507-114-1, and was finally issued in its final form on November 8, 2005 as Permit No. T1-040313. In accordance with IDAPA 58.01.01.313.03, this renewal is being submitted 6 months before the expiration date of the current permit.

This renewal application only addresses changes or updates to the Tier I Operating Permit. All other application information not provided is referenced to the current permit TI-040313 and the previous Tier I permit application dated June 29, 2000.

Since this application requests changes in compliance methods, permit limits, and applicable requirements, this application will also serve as a significant permit modification application. Golder understands that in order to change some applicable requirements, it may be necessary to modify the underlying Permit to Construct or Tier II permit (originally the PM10 SIP Operating Permit), but that is not included in this application.

The Tier I Operating Permit Renewal Application Form is provided in Appendix A.

1.2.2 Bridge Permit To Construct

The Simplot Don Plant Tier II Operating Permit (formerly called the PM10 SIP Operating Permit) expired on June 29, 2000. Simplot has proposed the use of a "Bridge" Permit To Construct as an method for resolving issues associated with the December 3, 1999 Tier II permit. In a December 21, 2005 letter to Lisa Kronberg and Martin Bauer with IDEQ, Sheila Bush (assistant general counsel for Simplot) provided the basis for the "Bridge" Permit to Construct (PTC). The primary purpose of this approach was to incorporate applicable requirements from the existing Tier II permit into a PTC so that the Tier II permit could be terminated. Because PTCs are not renewed, this would alleviate the need to continue to maintain two active permits that require periodic renewal.

In a December 21, 2005 letter to Lisa Kronberg and Martin Bauer with IDEQ, Sheila Bush (assistant general counsel for Simplot) provided the basis for the Bridge Permit to Construct (PTC). The primary purpose of this approach was to incorporate all remaining applicable requirements from the existing Tier II permit into a PTC so that the Tier II permit could be terminated. Because PTCs are not renewed, this would alleviate the need to continue to maintain two active permits that require periodic renewal.

Simplot would like to further pursue this approach as part of the Tier I permit renewal process.

2.0 REGULATORY APPLICABILITY SUMMARY

2.1 Idaho State Rules (IDAPA 58.01.01)

Table 1 gives the applicable and non-applicable requirements of the Rules for the Control of Air Pollution in Idaho (IDAPA 58.01.01) for the entire J.R. Simplot Don Plant facility.

2.2 Federal Air Quality Regulations (40 CFR)

Table 2 gives the applicable and non-applicable Federal Air Quality Regulations given in 40 CFR.

2.3 New Source Performance Standards (40 CFR Part 60)

Table 3 gives the applicable and non-applicable New Source Performance Standards given in 40 CFR Part 60 (IDAPA 58.01.01.590).

2.4 National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

Table 4 gives the applicable and non-applicable National Emission Standards for Hazardous Air Pollutants given in 40 CFR Part 61 for the Don Plant (IDAPA 58.01.01.591).

2.5 National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR Part 63)

Table 5 gives the applicable and non-applicable National Emission Standards for Hazardous Air Pollutants for Source Categories given in 40 CFR Part 63 (IDAPA 58.01.01.591).

2.6 Compliance Assurance Monitoring (40 CFR Part 64)

Compliance Assurance Monitoring (CAM), as required in 40 CFR Part 64, applies to the Don Plant facility. However, as given in section 64.5, facilities which have received a completeness determination from the permitting authority for a Title V permit application by April 20, 1998, are not required to submit CAM plans until the Title V permit is renewed. Since a completeness determination was given by IDEQ after the original July 1995 application submittal, the requirement for compliance with the Part 64 regulations did not have to be met until the permit is renewed. This renewal application will address those sources for which CAM will apply.

In general, CAM requirements apply to emission units subject to an emission limit or standard, where an add-on control device is used to comply with the applicable limit or standard, and the emission unit has pre-controlled potential emissions above the major source limit (100 tons/year). There are a few exemptions and the CAM rule would not apply to emission units subject to certain federal regulations issued after 1990 (e.g. 40 CFR Part 60, 61, and 63 rules) and where continuous compliance monitoring is already specified in an operating permit.

To determine if CAM requirements were applicable to emission units at the Simplot facility, all emission units were evaluated to determine if they are subject to an emission limitation or standard, used a control device to achieve compliance with the limitation or standard, and are not subject to federal regulations issued after 1990.

The Granulation 3 Limestone Baghouse and the Granulation 3 Diatomaceous Earth Baghouse were not reviewed since they are considered inherent process equipment and an integral part of the pneumatic transfer system, and are not control devices.

Similarly, CAM requirements for H_2SO_4 were determined to not be applicable to the Sulfuric Acid 400 Mist Eliminator because this component is also integral to the operation of the sulfuric acid plant and should not be considered a control device. Without this component, a significant fraction of the product of the process (i.e. sulfuric acid) would be exhausted through the stack.

CAM requirements were determined to not be applicable to the Sulfuric Acid 300 AmmSOx Scrubber for SO_2. New Source Performance Standard (NSPS) Subpart H (40 CFR 60.80) is applicable to Sulfuric Acid Plant No. 300, but this regulation was promulgated prior to 1990, therefore the exemption "emission limits or standards proposed by the Administrator after November 15, 1990" would not apply. However, Subpart H requires the installation of a continuous monitoring system for the measurement of SO_2 in accordance with the specified methods. These NSPS limits and monitoring requirements are written into the Tier I permit in Conditions 16.1, 16.2, and 16.10. Since the permit specifies a continuous compliance assurance method, this control device and pollutant can be exempted from CAM requirements.

There were several remaining source control devices that could potentially have CAM applicability - Sulfuric Acid 300 AmmSOx Scrubber (H_2SO_4/PM), Ammonium Sulfate Dryer Scrubber (PM/PM_{10}), Ammonium Sulfate Cooler Scrubber (PM/PM_{10}), Granulation No. 1 Baghouse (PM/PM_{10}), Granulation No. 2 Baghouse (PM/PM_{10}), Granulation No. 2 Cooler Baghouse (PM/PM_{10}), Granulation 3 Entoleter Scrubber (PM/PM_{10}/Fluorides), Granulation 3 Defluorination Scrubber (PM/PM_{10}/Fluorides), and Granulation 3 Baghouse (PM/PM_{10}).

These remaining potential CAM sources were then evaluated to see if potential uncontrolled emissions could be above 100 tons/year. Table 6 provides estimated uncontrolled emissions. For sources with individual permit limits, these were used along with a conservative (i.e. high) control efficiency to back-calculate uncontrolled emissions. For sources that have emission limits for multiple sources, average and maximum source test data for each individual source/control device was used for the estimated uncontrolled emissions calculation.

For control devices having both PM and PM_{10} emission limits, only PM was considered in Table 6 since 1) if uncontrolled PM emissions exceed the 100 ton per year threshold, CAM is applicable and would address PM_{10} emissions, and 2) if uncontrolled PM emissions are less than the 100 ton per year threshold, CAM is not be applicable to PM or PM_{10}.

It was estimated that the Ammonium Sulfate Dryer Scrubber and Ammonium Sulfate Cooler Scrubber would not have uncontrolled emissions above 100 ton/year and, therefore, CAM would not apply. The Sulfuric Acid 300 AmmSOx Scrubber, Granulation No. 1 Baghouse, Granulation No. 2 Baghouse, Granulation No. 2 Cooler Baghouse, Granulation 3 Entoleter Scrubber, Granulation 3 Defluorination Scrubber, and Granulation 3 Baghouse were conservatively estimated to have uncontrolled emissions of one or more applicable pollutants above 100 tons per year and the CAM requirements would therefore apply.

The Granulation 3 Entoleter Scrubber, Granulation 3 Defluorination Scrubber, and Granulation 3 Baghouse all contribute to the total emissions from the Granulation No. 3 Stack. Since there are only source test data and emissions limits for exhaust from the one stack, it is unknown how much each source contributes to these emissions. Some of these sources might not be CAM applicable, but Simplot does not have the data to determine this; therefore, CAM plans have been provided for each

of these sources. In other cases, the potential applicability of the CAM rule is dependent on the conservative control efficiency estimate used in Table 6. Simplot reserves the right to conduct future emissions testing that may demonstrate that CAM does not apply to some of these sources.

CAM plans for applicable sources and pollutants are provided in Appendix B.

3.0 EMISSIONS INVENTORY UPDATES

The emissions inventory for the Don Plant has been updated with recent source test data and revised AP-42 emission factors.

Table 7 provides a list of the emission units considered in the emissions inventory (identified by a unique Emissions Inventory Source ID). These emission units are grouped into sets of similar source types for purposes of compiling the emissions inventory (i.e. by Emissions Inventory Group ID). The applicable Tier I Permit Group ID is also provided in Table 7 for reference.

The comprehensive emissions inventory is provided in Appendix C. The printout in Appendix C provides summary tables for plant-wide emissions, followed by tables providing the data and methodology used to estimate emissions for each individual source and pollutant.

The information needed to calculate both maximum Actual and theoretical Maximum emissions is very extensive and was obtained through a number of sources. Existing plant data were collected including previous inventories, specific operational parameters, source tests, permits, continuous emissions monitoring systems (CEMS) data, flow diagrams, material safety data sheets (MSDS), and chemical analyses of solutions. Source tests are, obviously, the most accurate and easiest source of information and were therefore utilized wherever possible. Emission factors and equations contained in EPA's Compilation of Air Pollutant Emission Factors (AP-42 5th Edition) were used throughout the inventory as a means to estimate emissions.

Using these data, Actual Annual and theoretical Maximum Hourly and Maximum Annual pollutant emissions were calculated. However, if the source had permitted emissions, or the emissions were limited in some other way, a calculation was not made and the permitted value was entered.

Maximum Hourly emissions were typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate; i.e.

$$Maximum\ Hourly\ Emissions\ (lb/hr) = \frac{Emission\ Factor \times Maximum\ Annual\ Throughput}{Maximum\ Annual\ Hours\ of\ Operation}$$

Of course the units associated with the emission factor and the maximum annual throughput must be such that the resulting units from the product of the two values is pounds per year.

As a safety check, the calculation of maximum hourly emissions was also calculated using

$$Maximum\ Hourly\ Emissions\ (lb/hr) = \frac{1.3 \times Emission\ Factor \times Actual\ Annual\ Throughput}{Actual\ Annual\ Hours\ of\ Operation}$$

The purpose of this check was to acknowledge that, although the derived emission factor might be appropriate as a typical value over the maximum annual hours of operation, it might deviate from that value (for purposes of this emissions inventory, it was assumed to deviate as much as 30% higher than the typical emission factor) over a shorter period of actual operations. If this second approach to calculating the Maximum Hourly emissions resulted in a higher value, it was used.

Actual and Maximum Annual emissions were calculated as expected; i.e.

$$Actual\ Annual\ Emissions\ (tons/yr) = \frac{Emission\ Factor \times Actual\ Annual\ Throughput}{2000\ lb/ton}$$

$$Maximum\ Annual\ Emissions\ (tons/yr) = \frac{Emission\ Factor \times Maximum\ Annual\ Throughput}{2000\ lb/ton}$$

In certain cases, it was not possible to calculate emissions from individual contributing sources. This was usually the result of having several sources venting through a single emission point whose total emissions were known. In these cases, the total emissions were arbitrarily assigned to one of the contributing sources, and all other contributing sources were assigned emissions of zero. For these sources, the annual throughput and emissions columns are left blank and the reference explains which source the emissions are assigned to.

PM/PM_{10} emissions from vehicle travel over paved and unpaved plant roads were estimated using methods provided in AP-42. Calculations for Road Dust emissions can be found in Appendix D.

Fluoride emissions from various process water impoundments, including the gypsum stacks, were estimated using an emission factor taken from within a range of emission factors provided in the 1978 document entitled *Evaluations of Emissions and Control Techniques for Reducing Fluoride Emissions from Gypsum Ponds from the Phosphoric Acid Industry (EPA-600/2-78-124)*. This document reports a range of fluoride emission factors for gypsum ponds from 0.1 to 10 pounds per acre per day (lb/acre-day). These factors are intended to represent facility-wide emissions from process water at the facility, with the size of the facility being gauged by the size of the associated gypsum ponds. Given that a portion of these emissions are expected to be released in the cooling towers at the Simplot facility, a conservative value from within this range of 1.6 lb/acre-day has historically been used to estimate fluoride emissions from the gypsum stacks and other process water impoundments at the facility. Given that this factor is taken from the higher end of the emission factor range presented in the document cited, given the significant percentage of fluoride emissions from process water expected to be emitted from the cooling towers, the lack of other emissions data, and the historical use of this factor at the facility, Golder chose to continue with its use.

Fugitive ammonia emissions from the atmospheric and high-pressure ammonia storage and distribution systems were estimated based on emission factors developed for VOC emissions from chemical manufacturing facilities under contract to the U.S. EPA and published in the document entitled *Estimating Releases and Waste-Treatment Efficiencies for the Toxic Chemical Release Inventory Form Section 313, Title III of Superfund Amendments and Reauthorization Act of 1986 (December 1987)*. The factors used came from Table D-1, Average Fugitive Emission Factors for the Synthetic Organic Chemicals Manufacturing Industry (SOCMI). Fugitive emission factors are provided for flanges, valves (liquid), valves (gas), relief valves, and pump seals. Simplot determined the number of each type of emission point within each system and the emission factors were applied.

For purposes of this emissions inventory, it was assumed that these factors would be reasonably applicable to ammonia emissions from the ammonia storage and distribution systems.

3.1 Changes Affecting Permit Limits

By using the most current emission factors in the emissions inventory (e.g., AP-42 5th Edition), estimated maximum emissions for certain sources exceeded the existing Tier I permit limits. Since the emission estimates are based on the maximum short- and long-term throughput values originally permitted, this does not represent any change in actual emissions. Therefore, the Tier I permit limit should be increased accordingly.

In other cases, more reliable information concerning a given piece of equipment was obtained, resulting in more accurate emissions estimates (i.e., maximum natural gas usage rates). Again, no increase in actual emissions has occurred. Simplot requests that the Tier I limits be increased in these cases to reflect the actual emissions of the equipment.

Similarly, in instances where new emission factor data have led to lower emission estimates, the Tier I permit limits should be lowered accordingly.

A summary of the changes which result in higher or lower Tier I permit limits is provided in Table 8. As noted further is Section 4, Simplot is requesting that the Tier I permit limits be adjusted to reflect the changes in emission estimation techniques summarized in Table 8, since actual emissions will not have changed.

Note that these changes may need to be considered in the future when evaluating the baseline emissions for this facility.

4.0 CHANGES TO REQUIREMENTS FOR EMISSIONS UNIT GROUPS

This renewal application references the existing Tier I permit (No. TI-040313) for existing source-specific requirements for each emissions unit group. The following section describes requested changes to each emissions unit group.

4.1 Facility-Wide Conditions

Condition 2.19

This condition requires that Simplot maintain documentation of the actual sulfur content of each shipment of distillate fuel oil received. Most recently, IDEQ has required that Simplot test each batch of oil received to confirm that the sulfur content limits are met. However, given the small quantity of oil used at the facility (for generator testing and mobile sources), this high frequency of testing is onerous and not warranted. Therefore, it is requested that Condition 2.19 be reworded as follows:

2.19 The permittee shall maintain documentation of the actual sulfur content in percent by weight for distillate fuel oil received by one of the two following methods:

2.19.1 Obtaining a sulfur analysis certificate from the vendor for each batch received; or

2.19.2 Analyzing a distillate fuel oil sample from the onsite fuel storage tank using ASTM D129-64, D1552-83, D4057-81, or equivalent. Sampling and analysis

will occur once per calendar quarter, with at least 6 weeks between sampling events.

Condition 2.23 and 2.24

Simplot had requested a termination of the Fluoride in Vegetation Consent Order issued by IDEQ to Simplot dated September 1, 2004. All of the terms of the consent order have now been met. Simplot understands that the current Tier I operating permit does not provide for the enforceability of requirements contained in the consent order (as noted in a letter from the Idaho DEQ, dated April 13, 2006); therefore, Simplot is requesting that Conditions 2.23 and 2.24 be replaced with language that will provide enforceability of the Fluoride in Forage Sampling Plan and the Fluoride in Forage Notification Plan. Conditions 2.23 and 2.24 deal with the original fluoride monitoring plan and can be replaced based on the new consent order.

4.2 Emissions Unit Group 2: Ammonium Sulfate Plant

Permit Limits

As part of this renewal application, emission estimation methods were updated to reflect the most current U.S. Environmental Protection Agency emission factors and methodologies, account for new data, and correct errors. In certain cases, emissions estimated for certain sources are now higher than the previous permit limits for these sources. This change in estimated emissions is not due to any change in actual emissions from the source, but is simply due to a change in the data and/or methodology used to estimate the emission rate. Therefore, it is appropriate for the emission limit to be changed in the Tier I permit to preserve the intended process utilization level.

Therefore, Simplot would like to work with IDEQ to determine the regulatory mechanism by which the following permit limits can be changed in the Tier I permit. Until such a change is made, the emission estimation methods contained in this permit application should not be used as compliance demonstration.

Emissions Inventory Group ID	Emissions Inventory Source ID	Tier I Permit Group No.	Pollutant	Existing Tier I Permit Limit(s)	Proposed Tier I Permit Limit(s)
26, 27	500	2	CO	0.07 lb/hr, 0.3 tpy	0.25 lb/hr, 1.06 tpy
			NO_X	0.25 lb/hr, 1.1 tpy	0.29 lb/hr, 1.27 tpy
			SO_2	0.0007 lb/hr, 0.003 tpy	0.001 lb/hr, 0.004 tpy

The rationale behind each requested change is provided in Table 8.

Condition 4.10

Since the O&M manual has already been developed, this condition should be modified to read:

> The permittee shall operate each scrubber system in accordance with the O&M manual. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

Condition 4.11

Simplot proposes to replace the annual PM and PM_{10} compliance test requirement with a tiered testing schedule as follows:

> If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

Condition 4.11.2

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the particulate matter (PM) emissions compliance test.

Condition 4.12.2

Simplot requests that the AP-42 Section 1.4 emission factor requirement be updated to require the current July 1998 version once the permit limits are adjusted as requested above.

4.3 Emissions Unit Group 3: HPB&W Boiler

Condition 5.20

Simplot requests that the AP-42 Section 1.4 emission factor requirement be updated to require the current July 1998 version. In addition, in accordance with an email sent on December 29, 2005 from Daniel Pittman (IDEQ) to Leon Pruett (Simplot), it is proposed that NO_x be dropped from this condition. Monthly NO_x emissions will be estimated based on all available data from the NO_x CEMS for that month.

4.4 Emissions Unit Group 4: Babcock and Wilcox Boiler

Condition 6.12

In a December 29, 2005 email from Daniel Pitman (IDEQ) to Leon Pruett (Simplot), it was indicated that IDEQ was willing to agree that documentation of natural gas combustion in this boiler would provide a demonstration of compliance with the CO, NO_x, and SO_2 emission limits. Therefore, Simplot requests that this condition be changed to read "Simplot must retain adequate documentation to show that only natural gas fuel is burned in the Babcock and Wilcox boiler. Such documentation shall be sufficient to demonstrate continuous compliance with the CO, NO_x, and SO_2 emission limits for this source."

4.5 Emissions Unit Group 5: Granulation No. 1 Process

Permit Limits

As part of this renewal application, emission estimation methods were updated to reflect the most current U.S. Environmental Protection Agency emission factors and methodologies, account for new data, and correct errors. In certain cases, emissions estimated for certain sources are now higher than the previous permit limits for these sources. This change in estimated emission is not due to any change in actual emissions from the source, but is simply due to a change in the data and/or methodology used to estimate the emission rate. Therefore, it is appropriate for the emission limit to be changed in the Tier I permit to preserve the intended process utilization level.

Therefore, Simplot would like to work with IDEQ to determine the regulatory mechanism by which the following permit limits can be changed in the Tier I permit. Until such a change is made, the emission estimation methods contained in this permit application should not be used as compliance demonstration.

Emissions Inventory Group ID	Emissions Inventory Source ID	Tier I Permit Group No.	Pollutant	Existing Tier I Permit Limit(s)	Proposed Tier I Permit Limit(s)
13, 14, 15	400	5	CO	0.37 lb/hr, 1.6 tpy	1.62 lb/hr, 7.08 tpy
			NO_X	1.44 lb/hr, 6.3 tpy	1.92 lb/hr, 8.42 tpy
			SO_2	0.004 lb/hr, 0.019 tpy	0.01 lb/hr, 0.03 tpy

The rationale behind each requested change is provided in Table 8.

Condition 7.18.1

Simplot proposes to replace the annual PM and PM_{10} compliance test requirement with a tiered testing schedule as follows:

> If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

Condition 7.18.3

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the particulate matter (PM) emissions compliance test.

Condition 7.21

Simplot requests that the AP-42 Section 1.4 emission factor requirement be updated to require the current July 1998 version once the permit limits are adjusted as requested above.

Condition 7.27

This permit condition can be removed, since the facility is complying with the requirements of 40 CFR 63, Subpart BB.

Additional Conditions:

The Reasonably Available Control Technology (RACT) requirements in the April 21, 2004 Compliance Agreement and Voluntary Order are not included in the current Tier I permit. These RACT requirements establish emission limits or source testing frequencies to determine emission limits for certain source groups. To assist maintaining compliance with these requirements, Simplot requests that any remaining requirements from the consent order be incorporated into the Tier I permit. The consent order would then be terminated at that time.

For Granulation No. 1, the consent order contains the following specific requirement:

- Emissions from the granulation No. 1 plant shall not exceed the emissions limits in the following table:

Granulation No. 1 Plant Emission Limits

Source Description	Existing Permit				Proposed RACT PM/PM_{10}	
	PM		PM_{10}			
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Reactor/granulator stack Dryer stack Baghouse stack	23.8	104.26	19.52	85.48	10.9	47.7

Periodic Monitoring

In accordance with 40 CFR 63 Subpart BB and Tier I permit Condition 7.10, acceptable control device indicator ranges must be established and updated as new data becomes available to demonstrate continuous compliance with emission limits. The indicators being monitored are as follows.

Emission Source	**Control Device**	**Pollutant(s) Controlled**	**Proposed Indicator**
Granulation #1 - Dryer Stack	Scrubber	PM/PM_{10}/Fluorides	Scrubber Liquid Flow
			Pressure Drop
Granulation #1 – Reac./Gran. Stack	Scrubber	PM/PM_{10}/Fluorides	Scrubber Liquid Flow
			Pressure Drop

Acceptable indicator ranges have been determined using the methods required by Condition 7.17(2) of the current Tier I Permit.

CAM Plan

The CAM plan for the Granulation No. 1 Baghouse is provided in Appendix B. The U.S. EPA CAM Technical Guidance Document Fabric Filters was used to determine the indicator of performance. The primary indicator of performance is the pressure differential. Simplot is already required to monitor this parameter in Condition 7.13 of the current Tier I permit. Simplot will implement the requirements of the CAM plan within 180 days of issuance of the renewed Tier I permit.

4.6 Emissions Unit Group 6: Granulation No. 2 Process

Permit Limits

As part of this renewal application, emission estimation methods were updated to reflect the most current U.S. Environmental Protection Agency emission factors and methodologies, account for new data, and correct errors. In certain cases, emissions estimated for certain sources are now higher than the previous permit limits for these sources. This change in estimated emission is not due to any change in actual emissions from the source, but is simply due to a change in the data and/or methodology used to estimate the emission rate. Therefore, it is appropriate for the emission limit to be changed in the Tier I permit to preserve the intended process utilization level.

Therefore, Simplot would like to work with IDEQ to determine the regulatory mechanism by which the following permit limits can be changed in the Tier I permit. Until such a change is made, the emission estimation methods contained in this permit application should not be used as compliance demonstration.

Emissions Inventory Group ID	Emissions Inventory Source ID	Tier I Permit Group No.	Pollutant	Existing Tier I Permit Limit(s)	Proposed Tier I Permit Limit(s)
18, 19	453	6	CO	0.41 lb/hr, 1.8 tpy	1.62 lb/hr, 7.08 tpy
			NO_X	1.69 lb/hr, 7.4 tpy	1.92 lb/hr, 8.42 tpy
			SO_2	0.0016 lb/hr, 0.007 tpy	0.01 lb/hr, 0.03 tpy

The rationale behind each requested change is provided in Table 8.

Condition 8.18.1

Simplot proposes to replace the annual PM and PM_{10} compliance test requirement with a tiered testing schedule as follows:

> If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective

emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

Condition 8.18.3

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the particulate matter (PM) emissions compliance test.

Condition 8.21

Simplot requests that the AP-42 Section 1.4 emission factor requirement be updated to require the current July 1998 version.

Condition 8.27

This permit condition can be removed, since the facility is complying with the requirements of 40 CFR 63, Subpart BB.

Additional Conditions:

The Reasonably Available Control Technology (RACT) requirements in the April 21, 2004 Compliance Agreement and Voluntary Order are not included in the current Tier I permit. These RACT requirements establish emission limits or source testing frequencies to determine emission limits for certain source groups. To assist maintaining compliance with these requirements, Simplot requests that any remaining requirements from the consent order be incorporated into the Tier I permit. The consent order would then be terminated at that time.

For Granulation No. 2, the consent order contains the following specific requirement:

- Emissions from the Granulation No. 2 plant shall not exceed the emissions limits in the following table:

Granulation No. 2 Plant Emission Limits

Source Description	Existing Permit				Proposed RACT	
	PM		PM_{10}		PM/PM_{10}	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Tailgas scrubber stack Baghouse stack	22.02	96.47	18.06	79.12	10.7	46.9

Periodic Monitoring

In accordance with 40 CFR 63 Subpart BB and Tier I permit Condition 8.10, acceptable control device indicator ranges must be established and updated as new data becomes available to demonstrate continuous compliance with emission limits. The indicators being monitored are as follows.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator
Granulation #2 - Tailgas Scrubber Stack	Scrubber	PM/PM_{10}/Fluorides	Scrubber Liquid Flow
			Pressure Drop

Acceptable indicator ranges have been determined using the methods required by Condition 8.17(2) of the current Tier I Permit.

CAM Plan

The CAM plans for the Granulation No. 2 Baghouse and Granulation No. 2 Cooler Baghouse are provided in Appendix B. The U.S. EPA CAM Technical Guidance Document Fabric Filters was used to determine the indicator of performance. The primary indicator of performance is the pressure differential. Simplot is already required to monitor this parameter in Condition 8.13 of the current Tier I permit. Simplot will implement the requirements of the CAM plan within 180 days of issuance of the renewed Tier I permit.

4.7 Emissions Unit Group 7: Granulation No. 3 Process, East Bulking Station, and Defluorination Process

Condition 9.17

This condition should be updated to reflect future testing requirements.

Simplot requests to include the following Granulation No. 3 fluoride performance testing requirement contained in the Consent Order dated April 13, 2007 (Case No. E-040018 and E-050002):

> Simplot shall conduct fluoride performance testing on the Granulation No. 3 plant by or before December 31, 2007, and annually thereafter.

Condition 9.17.1

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the particulate matter (PM) emissions compliance test.

Condition 9.18

Simplot requests that the AP-42 Section 1.4 emission factor requirement be updated to require the current July 1998 version.

Condition 9.22.4

Since the most direct measurement of natural gas usage is in units of standard cubic feet (scf), Simplot requests that the wording of this condition be changed to indicate that gas usage will be recorded in MMscf per hour instead of MMBtu/hr. These MMscf per hour readings can be converted to MMBtu per hour using an average Btu per scf factor for gas delivered to the facility as needed for emission calculations.

CAM Plan

The CAM plans for the Granulation No. 3 Entoleter Scrubber, Granulation 3 Defluorination Scrubber, and Granulation No. 3 Baghouse are provided in Appendix B. The U.S. EPA CAM Technical Guidance Document Wet Scrubbers for PM Control, Wet Scrubbers for Gaseous Control, and Fabric Filters was used to determine the indicators of performance. The primary indicators of performance are pressure differential and liquid flow rate for the scrubbers and pressure differential for the baghouse. Simplot is already required to monitor these parameters in Condition 9.22.3 of the current Tier I permit for the Granulation No. 3 Entoleter Scubber and Granulation No. 3 Baghouse. Simplot will implement the requirements of the CAM plans within 180 days of issuance of the renewed Tier I permit.

Additionally, the April 13, 2007 Granulation No. 3 Consent Order (for Case No. E-040018 and E-050002) specifies additional performance indicator provisions for the Entoleter Scubber. These include requirements that the fresh water flow to the scrubber does not drop below 10 gallons per minute (gpm) while producing 21P and 18.5P, fresh water flow to the scrubber does not drop below 32 gpm while producing 0-45-0, the total scrubber flow does not drop below 600 gpm, and the scrubber duct spray water flow does not drop below 250 gpm. All monitoring data will be determined based upon daily averaging of data collected during operations on approximately four hour intervals.

4.8 Emissions Unit Group 8: Gypsum Stack (Pile)

Condition 10.9

The compliance demonstration method for PM_{10} and fluorides should be changed to reference the methods contained in this permit application.

4.9 Emissions Unit Group 10: Phosphoric Acid Manufacturing Plants

Condition 12.4

Simplot requests that the total reduced sulfur emission limits be removed from the Tier I permit. On July 10, 1995, EPA issued the White Paper for Streamlined Development of Part 70 Applications, which states in the pertinent part: The Agency has concluded, however, that only environmentally significant terms need to be included in part 70 permits. EPA recognizes that NSR permits contain terms that are obsolete, extraneous, environmentally insignificant or otherwise are not required as part of the SIP or federally-enforceable NSR program. Such terms, as subsequently explained, need not

be incorporated into the part 70 permit to fulfill the purposes of the NSR and Title V programs required under the Act. Id. at 13.

In accord with the White Paper described above, the J.R. Simplot Company requests that the Total Reduced Sulfur emission limits given in the Tier II permit for the Don Plant should not be included as a requirement in the Tier I/Tier II permit. This request is made on the premise that Total Reduced Sulfur limit should not have been included in the Tier II permit originally. The Total Reduced Sulfur emission limit for the Phosphoric Acid Plant Stack was not based on any applicable requirement or environmental need. There are no New Source Performance Standards (40 CFR Part 60), National Emission Standards for Hazardous Pollutants (40 CFR Part 61), National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR Part 63), National Ambient Air Quality Standards (40 CFR Part 50), Prevention of Significant Deterioration requirements (40 CFR Part 52), Approved State Implementation Plan requirements (40 CFR Part 52, Subpart N), State of Idaho (IDAPA 58.01.01), or other known applicable regulatory requirements which specifically limit Total Reduced Sulfur emissions from this source as currently configured and historically permitted, other than the unnecessary limits placed on the source during the state permitting process. Therefore, these emission limits should be deleted because they are extraneous and environmentally insignificant.

Condition 12.5

This condition currently requires that compliance with the PM_{10} fugitive emission limits be demonstrated "...as determined in Simplot's June 29, 2000 Tier I/II application Appendix D, Air Emissions Inventory". In a March 9, 2006 letter from IDEQ to Simplot, IDEQ indicated that

> "After review of those referenced application materials, it has been determined that it does not include any method to determine emissions rates. Those application materials simply state that emissions rates given are from a previously issued permit, and that the rates were not calculated. Therefore, in absence of a specific method for determining emissions rates in the referenced application materials, reasonable control of fugitive emissions in accordance with Tier I permit condition 2.1 and associated monitoring required by permit conditions 2.2 through 2.4 are appropriate for demonstrating compliance with the fugitive emission limit."

Based on this commentary, Simplot requests that Condition 12.5 be altered to indicate that compliance with Conditions 2.1 through 2.4 will demonstrate compliance with the fugitive emission limits.

Condition 12.13.1

Simplot proposes to replace the annual PM and PM_{10} compliance test requirement with a tiered testing schedule as follows:

> If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

Condition 12.13.3

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the particulate matter (PM) emissions compliance test.

Condition 12.14

Simplot requests that this condition be removed. Please see the justification for Condition 12.4.

Periodic Monitoring

In accordance with 40 CFR 63 Subpart AA and Tier I permit Condition 12.6, acceptable control device indicator ranges must be established and updated as new data becomes available to demonstrate continuous compliance with emission limits. The indicators being monitored are as follows.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator
Phosphoric Acid Plant Stack	Scrubber (Digester)	PM/PM_{10}/Fluorides	Scrubber Liquid Flow
			Pressure Drop
	Scrubber (Belt Filter)	PM/PM_{10}/Fluorides	Scrubber Liquid Flow
			Pressure Drop

Acceptable indicator ranges have been determined using the methods required by Condition 12.11(2) of the current Tier I Permit.

4.10 Emissions Unit Group 11: Plant Roads

Permit Limits

As part of this renewal application, emission estimation methods were updated to reflect the most current U.S. Environmental Protection Agency emission factors and methodologies, account for new data, and correct errors. In certain cases, emissions estimated for certain sources are now higher than the previous permit limits for these sources. This change in estimated emission is not due to any change in actual emissions from the source, but is simply due to a change in the data and/or methodology used to estimate the emission rate. Therefore, it is appropriate for the emission limit to be changed in the Tier I permit to preserve the intended process utilization level.

Therefore, Simplot would like to work with IDEQ to determine the regulatory mechanism by which the following permit limits can be changed in the Tier I permit. Until such a change is made, the emission estimation methods contained in this permit application should not be used as compliance demonstration.

Emissions Inventory Group ID	Emissions Inventory Source ID	Tier I Permit Group No.	Pollutant	Existing Tier I Permit Limit(s)	Proposed Tier I Permit Limit(s)
41	All in Group	11	PM	3.12 lb/hr, 13.65 tpy	14.10 lb/hr, 46.65 tpy
			PM_{10}	1.94 lb/hr, 8.48 tpy	5.10 lb/hr, 16.85 tpy

The rationale behind each requested change is provided in Table 8.

4.11 Emissions Unit Group 12: Reclaim Cooling Tower Cells Plant/Evaporative Cooling Towers

Condition 14.6.1

Simplot proposes to replace the annual PM and PM_{10} compliance test requirement with a tiered testing schedule as follows:

> Compliance with the PM and PM $_{10}$ hourly emission limits shall be determined by conducting a source test on one of the cooling tower cells in each of the three reclaim cooling towers within the first year of the permit term. If the measurement during the initial compliance test is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required on a second cooling tower cell in each of the three reclaim cooling towers in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually, on one cooling tower cell in each of the three reclaim cooling towers. The permittee shall select different cooling tower cells for testing from year to year until all of the cells within a particular cooling tower have been tested. Once all cells in a cooling tower have been tested, the cell selection process shall start again.

Condition 14.6.3

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the particulate matter (PM) emissions compliance test.

Condition 14.7

Simplot requests to replace Conditions 14.7.1 and 14.7.2 with the following reclaim cooling tower fluoride performance testing requirement contained in the Consent Order dated April 13, 2007 (Case No. E-040018 and E-050002):

> The permittee shall conduct performance testing on three (3) reclaim cooling tower cells during the first six (6) months of the calendar year, and three (3) different reclaim cooling tower cells during the last six (6) months of the calendar year. Testing shall be conducted in such a manner

that: 1) at least sixty (60) days separate each set (three cells) of reclaim cooling tower cell tests; 2) testing of the cells is conducted on a rotational basis, such that the permittee shall test different cells until all of the reclaim cooling tower cells have been tested. A total of six reclaim cooling tower cells will be tested in each calendar year. During the next calendar year the two cells not tested previously will be included in the next years testing; and 3) once all of the reclaim cooling tower cells have been tested, the selection process shall start again.

This schedule may need to be adjusted depending on when the renewed Tier I permit is issued and where Simplot is within the testing schedule.

Simplot requests that Condition 14.7.2 be removed, since it has been addressed in Condition 14.6.3.

Condition 14.8

This permit condition can be removed, since revised Conditions 14.6.1 and 14.7 contains source test requirements.

Condition 14.10

This permit condition can be removed. This information has been submitted to the DEQ.

4.12 Emissions Unit Group 13: Superphosphoric Acid Plant/Superphosphoric Acid Process Line

Condition 15.1.2

The fugitive emissions limit for the Superphosphoric Acid Plant needs to be reduced due to changes at the plant since the original limit was set. The process is now enclosed and the emissions that used to be fugitive are now collected and sent to a scrubber. In the emissions inventory, it is assumed that 2% of the emissions that used to be fugitive are not captured by the new system. The new limit should be 2% of the existing limit, or 0.0074 lb/hr and 0.032 tons/year.

Condition 15.15

This condition should be removed, since the required compliance testing has been completed.

Condition 15.20

This permit condition can be removed, since the facility is complying with the requirements of 40 CFR 63, Subpart AA.

Periodic Monitoring

In accordance with 40 CFR 63 Subpart AA and Tier I permit Condition 15.4, acceptable control device indicator ranges must be established and updated as new data becomes available to demonstrate continuous compliance with emission limits. The indicators being monitored are as follows.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator
Superphosphoric Acid Plant Stack	Scrubber	Fluorides	Scrubber Liquid Flow
			Pressure Drop

Acceptable indicator ranges have been determined using the methods required by Condition 15.10(2) of the current Tier I Permit.

4.13 Emissions Unit Group 14: Sulfuric Acid Plant No. 300

Condition 16.7.2

The sulfuric acid plant No. 300 is the only emissions unit with a specific permit condition pertaining to fugitive emissions. Simplot is requesting to remove this condition. Fugitive emission requirements are contained in Conditions 2.1 through 2.4, based on the underlying requirements from IDAPA 58.01.01.650-651. The underlying requirement for Condition 16.7.2 is IDAPA 58.01.01.625, which is not applicable to fugitive sources. Simplot understands that this requirement is in the Tier I permit since it was originally in Permit to Construct No. 077-00006, but it should have never been put in that permit to begin with.

Conditions 16.11

Simplot proposes to replace the annual compliance test requirement for SO_2, H_2SO_4, NH_3, PM (and PM_{10} and NO_x once the permit limits are established in accordance with the RACT requirements) with a tiered testing schedule as follows:

> If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

Condition 16.11.5

Simplot requests that this condition be modified to be more specific about the number of visible emissions evaluations required during compliance tests. As this condition currently reads, it appears that all pollutant compliance tests require a visible emissions evaluation to be performed. Simplot proposes to amend this condition and only require that visible emissions evaluations be performed during the PM_{10} emissions compliance test.

Additional Conditions:

Simplot requests that the following Reasonably Available Control Technology (RACT) requirements in the April 21, 2004 Compliance Agreement and Voluntary Order be included in the Tier I Permit:

- Emissions from the No. 300 sulfuric acid plant shall not exceed the emissions limits in the following table.

No. 300 Sulfuric Acid Plant Emission Limits

Source Description	Existing Permit NO_X	Proposed RACT NO_X
	T/yr	lb/hr (1)
No. 300 Sulfuric Acid Plant Stack	64	16.0

(1) 24-hour average

- The hourly PM_{10} RACT emissions limit (pounds per hour) for the No. 300 sulfuric acid plant shall be set by conducting five performance tests on the sulfuric acid plant stack. The limit will be determined based on the 95% confidence interval: limit = average of five tests plus 1.96 times the standard deviation of the five tests. The annual PM_{10} RACT limit (tons per year) shall be set by multiplying the pound per hour RACT limit by 8760 hours per year and dividing by 2000 pounds per ton. The first performance test shall be conducted prior to December 30, 2004, and tests shall be conducted annually thereafter. The sum of the emissions measured from Method 5 and 202 shall be considered PM_{10}.

CAM Plan

The exhaust of the Sulfuric Acid Plant No. 300 process is controlled by two scrubbers – the DynaWave scrubber, followed by the AmmSOx scrubber. The DynaWave scrubber is an integral part of the sulfuric acid production process that results in emissions and should not be considered subject to CAM. Only the AmmSOx scrubber would be subject to CAM and require a CAM plan. The CAM plan for the Sulfuric Acid Plant No. 300 AmmSOx Scrubber is provided in Appendix B. The U.S. EPA CAM Technical Guidance Document Wet Scrubbers for PM Control and Wet Scrubbers for Gaseous Control was used to determine the indicators of performance. The primary indicators of performance are pressure differential and liquid flow rate. Simplot will implement the requirements of the CAM plans within 180 days of issuance of the renewed Tier I permit.

4.14 Emissions Unit Group 15: Sulfuric Acid Plant No. 400

Condition 17.8

This condition specifies that Simplot must establish and operate an ambient SO_2 monitoring network in accordance with 40 CFR 52.675(b)(7). This requirement has been obsolete for many years as the facility has replaced the sulfuric acid plants that were in place at the time of the requirement and exceedences of the SO_2 ambient air quality standard have not been recorded at monitoring sites operated by Simplot for over 15 years. Simplot requests that IDEQ have this condition removed from the SO_2 State Implementation Plan and from the Tier I permit.

Condition 17.10

Simplot proposes to replace the annual SO_2 and H_2SO_4 mist compliance test requirement with a tiered testing schedule as follows:

If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that

emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

Additional Conditions:

Simplot requests that the following Reasonably Available Control Technology (RACT) requirements in the April 21, 2004 Compliance Agreement and Voluntary Order be included in the Tier I Permit:

- The hourly PM_{10} RACT emissions limit (pounds per hour) for the No. 400 sulfuric acid plant shall be set by conducting five performance tests on the sulfuric acid plant stack. The limit will be determined based on the 95% confidence interval: limit = average of five tests plus 1.96 times the standard deviation of the five tests. The annual PM_{10} RACT limit (tons per year) shall be set by multiplying the pound per hour RACT limit by 8760 hours per year and dividing by 2000 pounds per ton. The first performance test shall be conducted prior to December 30, 2004, and tests shall be conducted annually thereafter. The sum of the emissions measured from Method 5 and 202 shall be considered PM_{10}.

- The hourly NO_X RACT emissions limit (pounds per hour) for the No. 400 sulfuric acid plant shall be set by conducting five performance tests on the sulfuric acid plant stack. The limit will be determined based on the 95% confidence interval: limit = average of five tests plus 1.96 times the standard deviation of the five tests. The annual NO_X RACT limit (tons per year) shall be set by multiplying the pound per hour RACT limit by 8760 hours per year and dividing by 2000 pounds per ton. The first performance test shall be conducted prior to December 30, 2004, and tests shall be conducted annually thereafter.

- The permittee shall monitor and record the production rate of the No. 400 sulfuric acid plant in tons per hour, tons per rolling 24-hour period, and tons per any consecutive 12-month period.

Once the PM_{10} and NO_x RACT limits are established, Simplot proposes that the compliance test requirement for these pollutants be conducted in accordance with a tiered testing schedule as follows:

If the measurement during the initial compliance test, within the first year of the permit term, is less than or equal to 75% of the respective hourly emissions standard, no further testing of that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater then 75%, but less than or equal to 90%, of the hourly respective emission standard, a second test for that emission standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emissions standard, the permittee shall conduct a compliance test for that emissions standard annually.

5.0 INSIGNIFICANT SOURCES

Simplot is not aware of any changes to the list of insignificant sources relative to what was provided in previous Tier I permit application dated June 29, 2000.

6.0 COMPLIANCE STATUS AND CERTIFICATION

The status of ongoing notice of violations, consent orders, and compliance issues from the past several years are summarized below.

Fluoride in Forage Notice of Violation (March 16, 2007)

IDEQ and Simplot are currently in negotiations to resolve this Notice of Violation (NOV).

The NOV addresses fluoride vegetation standard exceedences for 2006.

Simplot and IDEQ have initiated discussions to address the issues raised in the NOV.

Granulation No. 3/Cooling Tower Consent Order (April 13, 2007)

Simplot is currently in compliance with the terms of this Order.

This Order addresses the March 9, 2006 NOV in which the Reclaim Cooling Tower and Granulation No. 3 fluoride source test values from 2004 were greater than permit limits. New performance testing requirements will need to be incorporated into the Tier I permit during the renewal period.

The renewal application requests that the source test language from the consent order be included in the Tier I permit.

Requirements for Cooling Towers at Phosphoric Acid Plants (March 6, 2007)

As detailed in a March 6, 2007 letter from Michael Bussell (Director, Office of Compliance and Enforcement, U.S. EPA) to Terry Uhling (Senior Vice President, Secretary and General Counsel, J.R. Simplot Company), EPA believes that the configuration of the reclaim water system at the Don Plant is inconsistent with the requirement in 40 CFR 63.602(e) that "*No owner or operator shall introduce into any evaporative cooling tower any liquid effluent from any wet scrubbing device installed to control emissions from process equipment.*"

Simplot continues to believe, as detailed in earlier correspondence with IDEQ and EPA, that the current reclaim water system at the Don Plant meets the requirement in 40 CFR 63.602(e). Simplot anticipates further discussion on this issue with IDEQ and EPA.

RACT Compliance Agreement and Voluntary Order (April 8, 2004)

Simplot is currently in compliance with the terms of this Order.

IDEQ has determined new PM/PM_{10} emission limits for Granulation No. 1 and Granulation No. 2 stacks, and a new NO_x emission rate for the No. 300 Sulfuric Acid Plant stack. Emission limits for PM_{10} for the No. 300 Sulfuric Acid Plant stack and PM_{10} and NO_x for the No. 400 Sulfuric Acid Plant stack will be determined by source testing to be completed by 2008.

The permit renewal requests that the agreed upon RACT emission rates in the Voluntary Order be incorporated into the Tier I permit. For those pollutants that have source testing requirements, new permit limits will need to be requested in 2008, once all required source testing is completed.

Fluoride in Forage Consent Order (September 1, 2004)

Simplot is currently in compliance with the terms of this Order.

As a result of the February 21, 2003 Notice of Violation (NOV) for fluoride vegetation standard exceedances in 2001 and 2002, Simplot was issued a consent order that required fluoride emissions modeling, a fluoride in forage sampling plan, education plan and notification plan, and a fluoride emissions identification and management plan. Simplot had requested to terminate the consent order in 2006 since all of the terms of the consent order had been met, but IDEQ stated that the Tier I operating permit does not provide for enforceability of the Forage Sampling Plan. The consent order can be terminated when the Forage Sampling Plan requirements are included into the Tier I permit.

Therefore, the renewal application requests that language be included in the Tier I permit that will provide enforceability of the Fluoride in Forage Sampling Plan and the Fluoride in Forage Notification Plan.

The compliance certification for this application is provided on the following page.

Compliance Certification

(IDAPA Rules 58.01.01.314.01 & 314.09)

Based upon information and belief, formed after reasonable inquiry, I certify the following:

a. The statements and information provided in this Tier I operating permit application are true, accurate, and complete;

b. For each applicable requirement with which an emissions unit is in compliance, I certify that the emissions unit will continue to comply with the applicable requirement;

c. For each applicable requirement that will become effective during the term of the Tier I operating permit that does not contain a more detailed schedule, I certify that the emissions unit will meet the applicable requirement on a timely basis;

d. For each applicable requirement that will become effective during the term of the Tier I operating permit that contains a more detailed schedule, I certify that the emissions unit will comply with the applicable requirement;

e. For each applicable requirement with which the emissions unit is not in compliance, I certify that the J. R. Simplot Company–Don Plant will negotiate a compliance plan with the Idaho Department of Environmental Quality.

The J. R. Simplot Company–Don Plant will submit annual compliance certifications during the term of the Tier I operating permit, unless more frequent certification is specified by an underlying applicable requirement or by the Department.

Responsible Corporate Official

Del Butler, Plant Manager
J. R. Simplot Company - Don Plant

Table 1 - Applicable and Non-Applicable IDAPA 58.01.01 Requirements

Citation under IDAPA 58.01.01	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
000	LEGAL AUTHORITY General Applicability	N/A	Yes	Yes	No requirements given
001	TITLE AND SCOPE General Applicability	N/A	Yes	Yes	No requirements given
002	WRITTEN INTERPRETATIONS General Applicability	N/A	Yes	Yes	No requirements given
003	ADMINISTRATIVE APPEALS General Applicability	N/A	Yes	Yes	No requirements given
004	CATCHLINES General Applicability	N/A	Yes	Yes	No requirements given
005	DEFINITIONS General Applicability	N/A	Yes	Yes	No requirements given
006	GENERAL DEFINITIONS General Applicability	N/A	Yes	Yes	No requirements given
007	DEFINITIONS FOR THE PURPOSES OF SECTIONS 200 THROUGH 228 AND 400 THROUGH 461 General Applicability	N/A	Yes	Yes	400-461 facility not in source category No requirements given
008	DEFINITIONS FOR THE PURPOSES OF SECTIONS 300 THROUGH 387 General Applicability	N/A	Yes	Yes	No requirements given
009	DEFINITIONS FOR THE PURPOSES OF 40 CFR PART 60 General Applicability	N/A	Yes	Yes	No requirements given
010	DEFINITIONS FOR THE PURPOSES OF 40 CFR PART 61 AND 40 CFR PART 63 General Applicability	N/A	Yes	Yes	No requirements given
011	DEFINITIONS FOR THE PURPOSES OF SECTIONS 790 THROUGH 799 General Applicability	N/A	Yes	Yes	No requirements given
106	ABBREVIATIONS General Applicability	N/A	Yes	Yes	No requirements given
107	INCORPORATIONS BY REFERENCE General Applicability	N/A	Yes	Yes	No requirements given
121	COMPLIANCE REQUIREMENTS BY DEQ General Applicability	All	Yes	Yes	Requirements determined by the Department stated elsewhere in this operating permit.
122	INFORMATION ORDERS BY DEQ General Applicability	N/A	Yes	Yes	(note C)
123	CERTIFICATION OF DOCUMENTS General Applicability	Recordkeeping	Yes	Yes	
124	TRUTH, ACCURACY AND COMPLETENESS OF DOCUMENTS General Applicability	Recordkeeping	Yes	Yes	
125	FALSE STATEMENTS General Applicability	N/A	Yes	Yes	
126	TAMPERING General Applicability	N/A	Yes	Yes	
127	FORMAT OF RESPONSES General Applicability	Recordkeeping	Yes	Yes	

Table 1 - Applicable and Non-Applicable IDAPA 58.01.01 Requirements

Citation under IDAPA 58.01.01	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
128	CONFIDENTIAL INFORMATION General Applicability	Recordkeeping	Yes	Yes	
130-136	UPSET, BREAKDOWN, AND EXCESS EMISSIONS REQUIREMENTS	Reporting/Recordkeeping	Yes	Yes	
140-149	VARIANCE PROCEDURES and PETITIONS General Applicability	N/A	No	N/A	(note C)
155	CIRCUMVENTION General Applicability	Recordkeeping	Yes	Yes	No installation or use of any device conceals an emission of air pollutants in accordance with these rules.
156	TOTAL COMPLIANCE General Applicability	Recordkeeping	Yes	Yes	
157	TEST METHODS AND PROCEDURES General Applicability	Recordkeeping for applicable requirement	Yes	Yes	
160	PROVISIONS GOVERNING SPECIFIC ACTIVITIES AND CONDITIONS General Applicability	Recordkeeping	Yes	Yes	
161	TOXIC SUBSTANCES General Applicability	Recordkeeping	Yes	Yes	
162	MODIFYING PHYSICAL CONDITIONS General Applicability	N/A	No	N/A	(note B)
163	SOURCE DENSITY General Applicability	N/A	No	N/A	(note B)
164	POLYCHLORINATED BIPHENYLS (PCBS) Requirements or Standards: Prohibits burning PCB containing materials, in quantities greater that five (5) ppm, except for disposal.	N/A	No	N/A	(note F)
175-181	PROCEDURES AND REQUIREMENTS FOR PERMITS ESTABLISHING A FACILITY EMISSIONS CAP General Applicability	N/A	No	N/A	(note C)
200-223	PROCEDURES AND REQUIREMENTS FOR PERMITS TO CONSTRUCT General Applicability	Reporting/Recordkeeping	Yes	Yes	
224-228	PERMIT TO CONSTRUCT FEES	Reporting/Recordkeeping	Yes	Yes	(note B, C)
300-316	PROCEDURES AND REQUIREMENTS FOR TIER I OPERATING PERMITS General Applicability	All	Yes	Yes	
317	INSIGNIFICANT ACTIVITIES	None	Yes	Yes	
321	TIER I OPERATING PERMIT CONTENTS General Applicability	All	Yes	Yes	
322	STANDARD CONTENTS OF TIER I OPERATING PERMITS General Applicability to Tier I Sources	N/A	No	N/A	(note B)
325	ADDITIONAL CONTENTS OF TIER I OPERATING PERMITS - PERMIT SHIELD General Applicability to Tier I Sources	N/A	Yes	Yes	No requirements given

Table 1 - Applicable and Non-Applicable IDAPA 58.01.01 Requirements

Citation under IDAPA 58.01.01	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
332	EMERGENCY AS AFFIRMATIVE DEFENSE REGARDING EXCESS EMISSIONS. General Applicability to Tier I Sources	Reporting/Recordkeeping	Yes	Yes	
335	GENERAL TIER I OPERATING PERMITS AND AUTHORIZATIONS TO OPERATE	Reporting/Recordkeeping	Yes	Yes	
336	TIER I OPERATING PERMITS FOR TIER I PORTABLE SOURCES	N/A	No	N/A	(note D)
360-368	STANDARD PROCESSING OF TIER I OPERATING PERMIT APPLICATIONS General Applicability to Tier I Sources	N/A	No	N/A	(note B)
369	TIER I OPERATING PERMIT RENEWAL General Applicability to Tier I Sources	Reporting/Recordkeeping	Yes	Yes	
380-386	REVISIONS General Applicability to Tier I Sources	Reporting/Recordkeeping	No	N/A	(note C)
387	REGISTRATION AND REGISTRATION FEES	Reporting/Recordkeeping	Yes	Yes	
388	APPLICABILITY	N/A	Yes	Yes	
389	REGISTRATION INFORMATION	Reporting	Yes	Yes	
390	REQUEST FOR INFORMATION	Provide information in a timely manner	Yes	Yes	(note C)
391	REGISTRATION FEE	Reporting/Recordkeeping	Yes	Yes	
392	REGISTRATION FEE ASSESSMENT	Recordkeeping	Yes	Yes	(note B)
393	PAYMENT OF TIER I REGISTRATION FEE	Reporting/Recordkeeping	Yes	Yes	
394	EFFECT OF DELINQUENCY ON APPLICATIONS	N/A	No	N/A	(note B)
395	APPEALS	Appeal filed if necessary	No	N/A	(note B,C)
396	EXEMPTIONS	N/A	Yes	Yes	
397	LUMP SUM PAYMENTS OF REGISTRATION FEES	N/A	No	N/A	(note B)
400-406	PROCEDURES AND REQUIREMENTS FOR TIER II OPERATING PERMITS	N/A	No	N/A	(note D)
407	TIER II OPERATING PERMIT PROCESSING FEE	N/A	No	N/A	(note D)
408	PAYMENT OF TIER II OPERATING PERMIT PROCESSING FEE	N/A	No	N/A	(note D)
409	RECEIPT AND USAGE OF FEES	N/A	No	N/A	(note D)
410	APPEALS	N/A	No	N/A	(note D)
440	REQUIREMENTS FOR ALTERNATIVE EMISSION LIMITS (BUBBLES)	Reporting/Recordkeeping	Yes	Yes	(note C)
441	DEMONSTRATION OF AMBIENT EQUIVALENCE	N/A	No	N/A	(note C)
460-461	REQUIREMENTS FOR EMISSION REDUCTION CREDIT and BANKING EMISSION REDUCTION CREDITS	Recordkeeping	Yes	Yes	

Table 1 - Applicable and Non-Applicable IDAPA 58.01.01 Requirements

Citation under IDAPA 58.01.01	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
470	PERMIT APPLICATION FEES FOR TIER II PERMITS	N/A	No	N/A	(note D)
500	REGISTRATION PROCEDURES AND REQUIREMENTS FOR PORTABLE EQUIPMENT	N/A	No	N/A	(note D)
510	STACK HEIGHTS AND DISPERSION TECHNIQUES	Recordkeeping	Yes	Yes	See 511-516
511	APPLICABILITY	Recordkeeping	Yes	Yes	
512	DEFINITIONS	Recordkeeping	Yes	Yes	
513	REQUIREMENTS	Recordkeeping	Yes	Yes	
514	OPPORTUNITY FOR PUBLIC HEARING	N/A	No	N/A	(note B)
515	APPROVAL OF FIELD STUDIES AND FLUID MODELS	N/A	No	N/A	Administrative and/or procedural
516	NO RESTRICTION ON ACTUAL STACK HEIGHT	N/A	Yes	Yes	No requirements given
550-561	AIR POLLUTION EMERGENCY RULE	N/A	No	N/A	(note B)
562	SPECIFIC EMERGENCY EPISODE ABATEMENT PLANS FOR POINT SOURCES	N/A	No	N/A	The Don Plant facility has not been required by the Department to prepare an Emergency Episode Abatement Plan. (note B)
563-574	TRANSPORTATION CONFORMITY	N/A	No	N/A	(note B)
575	AIR QUALITY STANDARDS AND AREA CLASSIFICATION	N/A	No	N/A	(note B)
576	GENERAL PROVISIONS FOR AMBIENT AIR QUALITY STANDARDS	Monitoring as required	Yes	Yes	Excludes IDAPA 58.01.01.576.03 Excludes IDAPA 58.01.01.576.04
577-581	AMBIENT AIR QUALITY STANDARDS FOR SPECIFIC AIR POLLUTANTS	N/A	No	No	2006 study showed exceedence of fluoride standards. No data yet for 2007. Note B.
582	INTERIM CONFORMITY PROVISTIONS FOR NORTHERN ADA COUNTY FORMER NONATTAINMENT AREA FOR PM10	N/A	No	N/A	(note B)
585-586	TOXIC AIR POLLUTANTS NON-CARCINOGENIC INCREMENTS, TOXIC AIR POLLUTANTS CARCINOGENIC INCREMENTS	Recordkeeping/Reporting	Yes	Yes	(note A; effective May 1, 1994)
587	LISTING OR DELISTING TOXIC AIR POLLUTANT INCREMENTS	N/A	No	N/A	(note C; effective May 1, 1994)
590	NEW SOURCE PERFORMANCE STANDARDS	All	Yes	Yes	Some subparts of 40 CFR part 60 apply and others do not; see Section 2.2 for applicable subparts

Table 1 - Applicable and Non-Applicable IDAPA 58.01.01 Requirements

Citation under IDAPA 58.01.01	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
591	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS	All	Yes	Yes	See Tables 3 and 4 for applicable sections. Note that there is a disagreement between Simplot and EPA on compliance status for 40 CFR Subpart AA.
600-603	RULES FOR CONTROL OF OPEN BURNING	Recordkeeping	Yes	Yes	
607	RECREATIONAL AND WARMING FIRES	Recordkeeping	Yes	Yes	
608	WEED CONTROL FIRES	Recordkeeping	Yes	Yes	
609	TRAINING FIRES	Recordkeeping	Yes	Yes	
610	INDUSTRIAL FLARES	N/A	Yes	Yes	No requirements given
611-617	CATEGORIES OF ALLOWABLE BURNING	N/A	Yes		
625	VISIBLE EMISSIONS	Monitoring, Reporting, Recordkeeping	Yes	Yes	A person shall not emit an air pollutant from any point of emission for a period or periods aggregating more that 3 minutes in any 60 minute period which is greater than 20% opacity.
626	GENERAL RESTRICTIONS ON VISIBLE EMISSIONS FROM WIGWAM BURNERS	N/A	No	N/A	(note B) Facility does not have this emissions unit.
650-651	RULES FOR CONTROL OF FUGITIVE DUST	N/A	Yes	Yes	Reasonable precautions are utilized to control fugitive emissions at this facility. This is not applicable to any point source.
675	FUEL BURNING EQUIPMENT - PARTICULATE MATTER Facility operates fuel burning equipment.	N/A	Yes	Yes	See rules 676-680
676	STANDARDS FOR NEW SOURCES	Recordkeeping	Yes	Yes	
677	STANDARDS FOR MINOR AND EXISTING SOURCES	Recordkeeping	Yes	Yes	
678	COMBINATIONS OF FUELS	N/A	No	N/A	(note C)
679	AVERAGING PERIOD	Recordkeeping	Yes	Yes	
680-681	ALTITUDE CORRECTION, TEST METHODS AND PROCEDURES	Recordkeeping	Yes	Yes	
700	PARTICULATE MATTER -- PROCESS WEIGHT LIMITATIONS.	N/A	No	N/A	See rules 701-703
701	PARTICULATE MATTER -- NEW EQUIPMENT PROCESS WEIGHT LIMITATIONS	Recordkeeping	Yes	Yes	(Note G)
702	PARTICULATE MATTER -- EXISTING EQUIPMENT PROCESS WEIGHT LIMITATIONS	Recordkeeping	Yes	Yes	(Note G)
703	PARTICULATE MATTER – OTHER PROCESSES		No	N/A	(Note D)
725	RULES FOR SULFUR CONTENT OF FUELS General Applicability	N/A	Yes	Yes	No requirements given
726	DEFINITIONS AS USED IN SECTIONS 727 THROUGH 729		No		(note E)

Table 1 - Applicable and Non-Applicable IDAPA 58.01.01 Requirements

Citation under IDAPA 58.01.01	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
727	RESIDUAL FUEL OILS		No		(note E)
728	DISTILLATE FUEL	Recordkeeping	Yes	Yes	
729	COAL		No		(note E)
750-751	RULES FOR CONTROL OF FLUORIDE EMISSIONS	N/A	No	N/A	Does not apply because a calciner is not part of the process.
760-764	RULES FOR THE CONTROL OF AMMONIA FROM DAIRY FARMS	N/A	No	N/A	(note D)
775-776	RULES FOR CONTROL OF ODORS General Applicability	Recordkeeping	Yes	Yes	(note A) No requirements given
785-787	RULES FOR CONTROL OF INCINERATORS	N/A	No	N/A	(note D)
790-799	RULES FOR THE CONTROL OF NONMETALLIC MINERAL PROCESSING PLANTS	N/A	No	N/A	(note D)
800	REGISTRATION FEE FOR PERMIT BY RULE	N/A	No	N/A	(note D)
801	PAYMENT OF FEES FOR PERMITS BY RULE REGISTRATION	N/A	No	N/A	(note D)
802	RECEIPT AND USAGE OF FEES	N/A	No	N/A	(note D)
805-808	RULES FOR CONTROL OF HOT-MIX ASPHALT PLANTS	N/A	No	N/A	(note D)
815-826	RULES FOR CONTROL OF KRAFT PULPING MILLS	N/A	No	N/A	(note D)
835-839	RULES FOR CONTROL OF RENDERING PLANTS	N/A	No	N/A	(note D)
845-848	RULES FOR CONTROL OF SULFUR OXIDE EMISSIONS FROM SULFURIC ACID PLANTS	N/A	Yes	Yes	(Note G, H)
855-858	COMBINED ZINC AND LEAD SMELTERS	N/A	No	N/A	(note D)
859-860	MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER MAY 30, 1991	N/A	No	N/A	(note D)
861-862	HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS THAT COMMENCED CONSTRUCTION, AFTER JUNE 20, 1996, OR FOR WHICH MODIFICATION IS COMMENCED AFTER MARCH 16, 1998	N/A	No	N/A	(note D)

APPLICABILITY EXPLANATION CODES

A - State only.
B - Regulation applies to regulatory authority.
C - Currently there are no projects or circumstances existing at the facility that would subject Simplot to these provisions; however, Simplot may use these provisions or comply with these provisions in the future if the circumstances arise.
D - Facility is not in this source category.
E - Facility does not use this fuel type.

F - Facility does not conduct this activity.
G - Since applicable New Source Performance Standards (40 CFR Part 60) and/or Tier I permit limits are more stringent, no applicable requirements result. Refer to site-specific emission limits.
H The Continuous Emissions Monitor (CEM) for the sulfuric acids plants will provide data demonstrating compliance with this regulation.

Table 2 - Applicable and Non-Applicable 40 CFR Regulations

Citation under Federal Regulations	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
40 CFR Part 50	National Primary and Secondary Ambient Air Quality Standards	N/A	No	N/A	(note A)
40 CFR Part 51	Requirements for Preparation, Adoption, and Submittal of Implementation Plans	N/A	No	N/A	(note A)
40 CFR Part 52	Approval and Promulgation of Implementation Plans	N/A	Yes	N/A	(note D)
40 CFR Part 53	Ambient Air Monitoring Reference and Equivalent Methods	N/A	No	N/A	(note B)
40 CFR Part 54	Prior Notice of Citizen Suits	N/A	No	N/A	Rules govern citizen suit actions.
40 CFR Part 55	Outer Continental Shelf Air Regulations	N/A	No	N/A	Rules govern Outer Continental Shelf activities.
40 CFR Part 56	Regional Consistency	N/A	No	N/A	(note A)
40 CFR Part 57	Primary Nonferrous Smelter Orders	N/A	No	N/A	(note C)
40 CFR Part 58	Ambient Air Quality Surveillance	N/A	No	N/A	Ambient air quality surveillance is not required at this facility.
40 CFR Part 59	National Volatile Organic Compound Emission Standards for Consumer and Commercial Products	N/A	No	N/A	(note C)
40 CFR Part 60	Standards of Performance for New Stationary Sources	All	Yes	Yes	See Table 3 for applicable subparts.
40 CFR Part 61	National Emission Standards for Hazardous Air Pollutants	All	Yes	Yes	See Table 4 for applicable subparts.
40 CFR Part 62	Approval and Promulgation of State Plans for Designated Facilities and Pollutants	N/A	No	N/A	(note A)
40 CFR Part 63	National Emission Standards for Hazardous Air Pollutants for Source Categories	N/A	Yes	N/A	See Table 5. Only Subparts A, AA, BB, and DDDDD are applicable.
40 CFR Part 64	Compliance Assurance Monitoring	All	Yes	Yes	Requirements must be met when Tier I permit is renewed.
40 CFR Part 65	Consolidated Federal Air Rule	N/A	No	N/A	(note A)
40 CFR Part 66	Assessment and Collection of Noncompliance Penalties by EPA	N/A	No	N/A	(note A)
40 CFR Part 67	EPA Approval of State Noncompliance Penalty Program	N/A	No	N/A	(note A)
40 CFR Part 68	Chemical Accident Prevention Provisions	Yes	Yes	Yes	RMP submitted in 1999.
40 CFR Part 69	Special Exemptions from Requirements of the Clean Air Act	N/A	No	N/A	(note A)
40 CFR Part 70	State Operating Permit Programs	N/A	No	N/A	(note A)
40 CFR Part 71	Federal Operating Permit Programs	N/A	No	N/A	(note A)
40 CFR Part 72	Permits Regulation	N/A	No	N/A	(note A)
40 CFR Part 73	Sulfur Dioxide Allowance System	N/A	No	N/A	(note C)
40 CFR Part 74	Sulfur Dioxide Opt-Ins	N/A	No	N/A	(note C)
40 CFR Part 75	Continuous Emission Monitoring	N/A	No	N/A	(note C)

Table 2 - Applicable and Non-Applicable 40 CFR Regulations

Citation under Federal Regulations	Title	Compliance Determination Method (Record Keeping, Monitoring, Reporting, Test Method)	Applicable Yes or No	In Compliance Yes or No	Explanation Code and/or Additional Information
40 CFR Part 76	Acid Rain Nitrogen Oxides Emission Reduction Program	N/A	No	N/A	(note C)
40 CFR Part 77	Excess Emissions	N/A	No	N/A	(note C)
40 CFR Part 78	Appeal Procedures for Acid Rain Program	N/A	No	N/A	(note C)
40 CFR Part 79	Registration of Fuels and Fuel Additives	N/A	No	N/A	(note C)
40 CFR Part 80	Regulation of Fuels and Fuel Additives	N/A	No	N/A	(note C)
40 CFR Part 81	Designation of Areas for Air Quality Planning Purposes	N/A	No	N/A	(note C)
40 CFR Part 82	Protection of Stratospheric Ozone	N/A	No	N/A	(note C)
40 CFR Part 85	Control of Air Pollution From Mobile Sources	N/A	No	N/A	(note C)
40 CFR Part 86	Control of Emissions From New and In-Use Highway Vehicles and Engines	N/A	No	N/A	(note C)
40 CFR Part 87	Control of Air Pollution From Aircraft and Aircraft Engines	N/A	No	N/A	(note C)
40 CFR Part 88	Clean-Fuel Vehicles	N/A	No	N/A	(note C)
40 CFR Part 89	Control of Emissions From New and In-Use Nonroad Compression-Ignition Engines	N/A	No	N/A	(note C)
40 CFR Part 90	Control of Emissions From Nonroad Spark-Ignition Engines at or Below 19 Kilowatts	N/A	No	N/A	(note C)
40 CFR Part 91	Control of Emissions From Marine Spark-Ignition Engines	N/A	No	N/A	(note C)
40 CFR Part 92	Control of Air Pollution From Locomotives and Locomotive Engines	N/A	No	N/A	(note C)
40 CFR Part 93	Determining Conformity of Federal Actions to State or Federal Implementation Plans	N/A	No	N/A	(note A)
40 CFR Part 94	Control of Emissions from Marine Compression-Ignition Engines	N/A	No	N/A	(note C)
40 CFR Part 95	Mandatory Patent Licenses	N/A	No	N/A	(note C)
40 CFR Part 96	NO_X Budget Trading Program and CAIR NO_X and SO_2 Trading Programs for State Implementation Plans	N/A	No	N/A	(note A)
40 CFR Part 97	Federal NO_X Budget Trading Programs and CAIR NO_X and SO_2 Trading Programs	N/A	No	N/A	(note A)

APPLICABILITY EXPLANATION CODES

A - Regulation applies to regulatory authority.

B - Rules governing ambient air quality standards and/or monitoring or definitions of criteria for air pollution emergency purposes and do not apply to individual sources.

C - Facility is not in this source category.

D - **40 CFR 52.675 Control Strategy: Sulfur Oxides - Eastern Idaho Intrastate Air Quality Control Region** specifies certain requirements pertaining to the Don Plant. The regulations and plants referenced in the section are no longer in existence and the certification and monitoring required in the section were completed over twenty years ago. As a result, the requirements contained in this section are obsolete and environmentally insignificant and, therefore, need not be incorporated into the Tier I permit.

Table 3 - Applicable and Non-Applicable New Source Performance Standards (40 CFR Part 60)

Rule Description - 40 CFR Part 60 - New Source Performance Standards	Applicable? (Explanation Code)
Large Municipal Waste Combustors Constructed On or Before September 20, 1994 (Subpart Cb)	No
Municipal Solid Waste Landfills (Subpart Cc)	No
Sulfuric Acid Production Units (Subpart Cd)	Yes (note A)
Hospital/Medical/Infectious Waste Incinerators (Subpart Ce)	No
Fossil fuel-fired steam generators (Subpart D)	No
Electric utility steam generating units (Subpart Da)	No
Industrial-Commercial-Institutional steam generating units (Subpart Db)	Yes
Small Industrial-Commercial-Institutional Steam Generating Units (Subpart Dc)	Yes
Incinerators (Subpart E)	No
Municipal waste combustors (Subpart Ea)	No
Large Municipal Waste Combustors (Subpart Eb)	No
Hospital/Medical/Infectious Waste Incinerators (Subpart Ec)	No
Portland cement plants (Subpart F)	No
Nitric Acid Plants (Subpart G)	Yes
Sulfuric Acid Plants (Subpart H)	Yes
Hot Mix Asphalt Facilities (Subpart I)	No
Petroleum refineries (Subpart J)	No
Storage vessels for petroleum liquids for which construction, reconstruction, or modification, commenced after June 11, 1973, and prior to May 19, 1978 (Subpart K)	No
Storage vessels for petroleum liquids for which construction, reconstruction, or modification, commenced after May 18, 1978, and prior to July 23, 1984 (Subpart Ka)	No
Volatile Organic Liquid Storage Vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984 (Subpart Kb)	No
Secondary lead smelters (Subpart L)	No
Secondary brass and bronze production plants (Subpart M)	No
Iron and steel plants (primary emissions from basic oxygen furnaces constructed after June 11, 1973) (Subpart N)	No
Iron and steel plants (secondary emissions from basic oxygen process steelmaking facilities constructed after January 20, 1983) (Subpart Na)	No
Sewage treatment plants (Subpart O)	No
Primary smelters: Copper (Subpart P)	No
Primary smelters: Zinc (Subpart Q)	No
Primary smelters: Lead (Subpart R)	No
Primary aluminum reduction plants (Subpart S)	No
Phosphate Fertilizer Industry: Wet process phosphoric acid plants (Subpart T)	Yes
Phosphate Fertilizer Industry: Superphosphoric acid plants (Subpart U)	Yes
Phosphate Fertilizer Industry: Diammonium phosphate plants (Subpart V)	No
Phosphate Fertilizer Industry: Triple superphosphate plants (Subpart W)	No (note B)
Phosphate Fertilizer Industry: Granular triple superphosphate storage facilities (Subpart X)	No (note B)
Coal preparation plants (Subpart Y)	No
Ferroalloy production facilities (Subpart Z)	No
Steel Plants: Electric arc furnaces (Subpart AA)	No
Steel Plants: Electric arc furnaces and Argon-Oxygen decarburization vessels constructed after August 17, 1983 (Subpart AAa)	No
Kraft pulp mills (Subpart BB)	No

Table 3 - Applicable and Non-Applicable New Source Performance Standards (40 CFR Part 60)

Rule Description - 40 CFR Part 60 - New Source Performance Standards	Applicable? (Explanation Code)
Glass manufacturing plants (Subpart CC)	No
Grain elevators (Subpart DD)	No
Surface coating of metal furniture (Subpart EE)	No
Stationary gas turbines (Subpart GG)	No
Lime manufacturing plants (Subpart HH)	No
Lead-acid battery manufacturing plants (Subpart KK)	No
Metallic mineral processing plants (Subpart LL)	No
Automobile and light-duty truck surface coating operations (Subpart MM)	No
Phosphate rock plants (Subpart NN)	No
Ammonium sulfate manufacture (Subpart PP)	No
Graphic Arts Industry: Publication rotogravure printing (Subpart QQ)	No
Pressure sensitive tape and label surface coating operations (Subpart RR)	No
Industrial surface coating: large appliances (Subpart SS)	No
Metal coil surface coating (Subpart TT)	No
Asphalt processing and asphalt roofing manufacture (Subpart UU)	No
Equipment leaks of VOC in the synthetic organic chemicals manufacturing industry (Subpart VV)	No
Beverage can surface coating industry (Subpart WW)	No
Bulk gasoline terminals (Subpart XX)	No
New residential wood heaters (Subpart AAA)	No
Rubber Tire Manufacturing Industry (Subpart BBB)	No
Polymer manufacturing industry (Subpart DDD)	No
Flexible Vinyl and Urethane Coating and Printing (Subpart FFF)	No
Equipment leaks of VOC in petroleum refineries (Subpart GGG)	No
Synthetic fiber production facilities (Subpart HHH)	No
Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes (Subpart III)	No
Petroleum dry cleaners (Subpart JJJ)	No
Onshore Natural Gas Processing Plants (Subpart KKK)	No
Onshore Natural Gas Processing: SO_2 Emissions (Subpart LLL)	No
Synthetic Organic Chemical Manufacturing Industry Distillation Operations (Subpart NNN)	No
Nonmetallic Mineral Processing Plants (Subpart OOO)	No
Wool Fiberglass Insulation Manufacturing Plants (Subpart PPP)	No
Petroleum Refinery Wastewater System VOC Emissions (Subpart QQQ)	No
Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (Subpart RRR)	No
Magnetic Tape Coating Facilities (Subpart SSS)	No
Industrial surface coating: Plastic parts for business machines (Subpart TTT)	No
Calciners and Dryers in Mineral Industries (Subpart UUU)	No
Polymeric Coating of Supporting Substrates Facilities (Subpart VVV)	No
Municipal Solid Waste Landfills (Subpart WWW)	No
Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001 (Subpart AAAA)	No
Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (Subpart BBBB)	No

Table 3 - Applicable and Non-Applicable New Source Performance Standards (40 CFR Part 60)

Rule Description - 40 CFR Part 60 - New Source Performance Standards	Applicable? (Explanation Code)
Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced on or After June 1, 2001 (Subpart CCCC)	No
Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or Before November 30, 1999 (Subpart DDDD)	No
Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006 (Subpart EEEE)	No
Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004 (Subpart FFFF)	No
Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units (Subpart HHHH)	No
Stationary Compression Ignition Internal Combustion Engines (Subpart IIII)	No
Stationary Combustion Turbines (Subpart KKKK)	No

APPLICABILITY EXPLANATION CODES

A - Since 40 CFR 60 Subpart H is more stringent, no applicable requirements result. Refer to site-specific emission limits.

B - Does not apply because process as defined in the subpart is not the same process used at this facility.

Table 4 - Applicable and Non-Applicable National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

Rule Description - 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants	Applicable? (Explanation Code)
A--General Provisions.	No
B--Radon Emissions from Underground Uranium Mines	No
C--Beryllium.	No
D--Beryllium Rocket Motor Firing.	No
E--Mercury.	No
F--Vinyl Chloride.	No
H--Emissions of Radionuclides other than Radon from Department of Energy Facilities.	No
I--Radionuclide Emissions from Federal Facilities Other than Nuclear Regulatory Commission Licenses and not covered by Subpart H.	No
J--Equipment Leaks (Fugitive Emission Sources) of Benzene.	No
K--Radionuclide Emissions from Elemental Phosphorus Plants.	No
L--Benzene Emissions from Coke By-Product Recovery Plants.	No
M--Asbestos.	Yes (A)
N--Inorganic Arsenic Emissions from Glass Manufacturing Plants.	No
O--Inorganic Arsenic Emissions from Primary Copper Smelters.	No
P--Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities.	No
Q--Radon Emissions from Department of Energy Facilities.	No
R--Radon Emission from Phosphogypsum Stacks.	No (B)
T--Radon Emissions from the Disposal of Uranium Mill Tailings.	No
V--Equipment Leaks (Fugitive Emission Sources).	No
W--Radon Emissions from Operating Mill Tailings.	No
Y--Benzene Emissions from Benzene Storage Vessels.	No
BB--Benzene Emission from Benzene Transfer Operations.	No
FF--Benzene Waste Operations.	No

APPLICABILITY EXPLANATION CODES

A. The Don Plant has a certified asbestos removal crew and asbestos removal program in place.
B. Does not apply because the phosphogypsum stack is active.

Table 5 – Applicable and Non-Applicable National Emission Standards For Hazardous Air Pollutants For Source Categories (40 CFR Part 63)

Rule Description – 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories	Applicable? (Explanation Code)
A -- General Provisions	Yes
B -- Requirements for Control Technology Determinations for Major Sources in Accordance with CAA Sections 112(g) and 112(j)	No
C -- List of Hazardous Air Pollutants, Petition Process, Lesser Quanitity Designations, Source Category List	No
D -- Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants	No
E -- Approval of State Programs and Delegation of Federal Authorities	No
F -- Synthetic Organic Chemical Manufacturing Industry	No
G -- Synthetic Organic Chemical Manufacturing Industry: Process Vents, Storage Vessels, Transfer Operations, and Wastewater	No
H -- Equipment Leaks	No
I -- Processes Subject to the Negotiated Regulation for Equipment Leaks	No
J -- Polyvinyl Chloride and Copolymers Production	No
L -- Coke Oven Batteries	No
M -- Perchloroethylene Dry Cleaning	No
N -- Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	No
O -- Ethylene Oxide Sterilization Facilities	No
Q -- Industrial Process Cooling Towers	
R -- Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	No
S -- Pulp and Paper Industry	No
T -- Halogenated Solvent Cleaning	No
U -- Group 1 Polymers and Resins	No
W -- Epoxy Resins Production and Non-Nylon Polyamides Production	No
X -- Secondary Lead Smelting	No
Y -- Marine Tank Vessel Loading Operations	No
AA -- Phosphoric Acid Manufacturing Plants	Yes
BB -- Phosphate Fertilizers Production Plants	Yes
CC -- Petroleum Refineries	No
DD -- Off-Site Waste and Recovery Operations	No
EE -- Magnetic Tape Manufacturing Operations	No
GG -- Aerospace Manufacturing and Rework Facilities	No
HH -- Oil and Natural Gas Production Facilities	No
II -- Shipbuilding and Ship Repair (Surface Coating)	No
JJ -- Wood Furniture Manufacturing Operations	No
KK -- Printing and Publishing	No
LL -- Primary Aluminum Reduction Plants	No
MM -- Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills	No
OO -- Tanks - Level 1	No
PP -- Containers	No
QQ -- Surface Impoundments	No
RR -- Individual Drain Systems	No
SS -- Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process	No
TT -- Equipment Leaks - Control Level 1	No
UU -- Equipment Leaks - Control Level 2	No
VV -- Oil-Water Separators and Organic-Water Separators	No
WW Storage Vessels (Tanks) - Control Level 2	No
XX -- Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations	No
YY -- Generic Maximum Achievable Control Technology Standards	No
CCC -- Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants	No
DDD -- Mineral Wool Production	No
EEE -- Hazardous Waste Combustors	No
GGG -- Pharmaceuticals Production	No
HHH -- Natural Gas Transmission and Storage Facilities	No
III -- Flexible Polyurethane Foam Production	No
JJJ -- Goup IV Polymers and Resins	No
LLL -- Portland Cement Manufacturing Industry	No
MMM -- Pesticide Active Ingredient Production	No

Table 5 – Applicable and Non-Applicable National Emission Standards For Hazardous Air Pollutants For Source Categories (40 CFR Part 63)

Rule Description – 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories	Applicable? (Explanation Code)
NNN -- Wool Fiberglass Manufacturing	No
OOO -- Manufacture of Amino/Phenolic Resins	No
PPP -- Polyether Polyols Production	No
QQQ -- Primary Copper Smelting	No
RRR -- Secondary Aluminum Production	No
TTT -- Primary Lead Smelting	No
UUU -- Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units	No
VVV -- Publicly Owned Treatment Works	No
XXX -- Ferroalloys Production: Ferromanganese and Silicomanganese	No
AAAA -- Municipal Solid Waste Landfills	No
CCCC -- Manufacturing of Nutritional Yeast	No
DDDD -- Plywood and Composite Wood Products	No
EEEE -- Organic Liquids Distribution (non-gasoline)	No
FFFF -- Miscellaneous Organic Chemical Manufacturing (MON)	No
GGGG -- Solvent Extraction for Vegetable Oil Production	No
HHHH -- Wet-Formed Fiberglass Mat Production	No
IIII -- Auto and Light Duty Trucks (surface coating)	No
JJJJ -- Paper and Other Web (surface coating)	No
KKKK -- Metal Can Coating (surface coating)	No
MMMM -- Miscellaneous Metal Parts and Products (surface coating)	No
NNNN -- Large Appliances (surface coating)	No
OOOO -- Fabric Printing, Coating, and Dyeing	No
PPPP -- Plastic Parts (surface coating)	No
QQQQ -- Wood Building Products (surface coating)	No
RRRR -- Metal Furniture (surface coating)	No
SSSS -- Surface Coating of Metal Coil	No
TTTT -- Leather Finishing Operations	No
UUUU -- Cellulose Products Manufacturing	No
VVVV -- Boat Manufacturing	No
WWWW -- Reinforced Plastic Composites Production	No
XXXX -- Rubber Tire Manufacturing	No
YYYY -- Stationary Combustion Turbines	No
ZZZZ -- Stationary Reciprocating Internal Combustion Engines	No
AAAAA -- Lime Manufacturing	No
BBBBB -- Semiconductor Manufacturing	No
CCCCC -- Coke Ovens: Pushing, Quenching, and Battery Stacks	No
DDDDD -- Industrial, Commercial, and Institutional Boilers and Process Heaters	Yes
EEEEE -- Iron and Steel Foundries	No
FFFFF -- Integrated Iron and Steel Manufacturing	No
GGGGG -- Site Remediation	No
HHHHH -- Miscellaneous Coating Manufacturing	No
IIIII -- Mercury Cell Chlor-Alkali Plants	No
JJJJJ -- Brick and Structural Clay Products Manufacturing	No
KKKKK -- Clay Ceramics Manufacturing	No
LLLLL -- Asphalt Processing and Asphalt Roofing Manufacturing	No
MMMMM -- Flexible Polyurethane Foam Fabrication Operations	No
NNNNN -- Hydrochloric Acid Production	No
PPPPP -- Engine Test Cells/Stands	No
QQQQQ -- Friction Materials Manufacturing	No
RRRRR -- Taconite Iron Ore Processing	No
SSSSS -- Refractory Products Manufacturing	No
TTTTT -- Primary Magnesium Refining	No

Table 6
CAM Applicability Calculations
JR Simplot Don Siding Plant, Pocatello, ID

Source Group*	Control Device & Monitoring	Emission Factor Type	Pollutant	Emission Factor (Permit Limit or Source Test Result)		Hours of Operation (hrs/yr)	Controlled Annual Emissions[1] (tons/year)	Conservative Control Efficiency (%)	Estimated Uncontrolled Emissions (tons/yr)	
Ammonium Sulfate Plant	**Dryer Scrubber** (monitor fluid flow & pressure drop)	Source Test Average	PM	0.62 lb/hr	(2)	8,760	--	90	27	(a)
		Maximum	PM	1.5 lb/hr	(2)	8,760	--	90	66	(a)
	Cooler Scrubber (monitor fluid flow & pressure drop)	Source Test Average	PM	0.69 lb/hr	(2)	8,760	--	90	30	(a)
		Maximum	PM	2.13 lb/hr	(2)	8,760	--	90	93	(a)
Granulation 1	**Granulation No. 1 Baghouse** (monitor pressure drop)	Source Test Average	PM	0.26 lb/hr	(2)	8,760	--	99.9	1,139	(a)
		Maximum	PM	0.51 lb/hr	(2)	8,760	--	99.9	2,234	(a)
Granulation 2	**Granulation No. 2 Baghouse** (monitor pressure drop)	Source Test Average	PM	2.17 lb/hr	(2)	8,760	--	99.9	9,505	(a)
		Maximum	PM	4.24 lb/hr	(2)	8,760	--	99.9	18,571	(a)
Granulation 3 [1]	**Entoleter Scrubber** (monitor fluid flow & pressure drop)	Source Test Average	PM	4.00 lb/hr	(2)	8,760	--	90	175	(a)
		Maximum	PM	6.92 lb/hr	(2)	8,760	30.7	90	307	(b)
		Average	Fluorides	0.19 lb/hr	(2)	8,760	--	90	8	(a)
		Maximum	Fluorides	0.27 lb/hr	(2)	8,760	5.6	90	56	(b)
	Defluorination Scrubber (monitor fluid flow & pressure drop)			Included above - no independent data available						
	Baghouse (monitor pressure drop)		PM	Included above - no independent data available						
	Cooler Baghouse		PM	Included above - no independent data available						
Sulfuric Acid 300	**DynaWave scrubber followed by Ammsox packed-bed ammonia scrubber** (SO_2 CEM)	Limit	H_2SO_4	3 lb/hr	(1)	8760	13	98	650	(b)
		Inventory	PM	5.2 lb/hr	(3)	8760	20.6	85	137	(b)

* Sources with pollutants subject to an emissions limitation or standard, that uses a control device to achieve compliance with the limitation or standard, and is not subject to a federal regulation issued after 1990. CAM will apply if uncontrolled emissions are above 100 tons/yr.

Notes:
(a) Uncontrolled emissions (tons/yr) = (source test results [lbs/hr]) x (hours of operation [hrs/yr]) / (1-(assumed control efficiency [%]/100)) / (2000 lbs/ton)
(b) Uncontrolled emissions (tons/yr) = (permit limit or emissions inventory controlled annual emissions [tons/yr]) x (1-(assumed control efficiency [%]/100))

References:
(1) Permit limit from Simplot Tier 1 Permit No. T1-040313.
(2) Source test results, past three years.
(3) Calculated emissions from emissions inventory.

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
1.0	Sulfuric Acid Plant #300 & #400 Stacks	14	Sulfuric Acid Plant #300	100.0	#300 Sulfuric Acid Plant Main Stack	Pt	#300 Sulfuric Stack
		15	Sulfuric Acid Plant #400	114.0	#400 Sulfuric Acid Plant Main Stack	Pt	#400 Sulfuric Stack
2.0	Sulfuric Acid Plant #300 & #400 Fugitives	Subset of groups 14 and 15	Sulfuric Acid Plant #300	103.0	Rail Car Steaming	Fug	Car Lids
			Sulfuric Acid Plant #300	104.0	Rail Car Dumping	Fug	Dump Pit
			Sulfuric Acid Plant #300	112.1	AmmSO_x Scrubber Valves, Flanges & Pumps	Fug	Inside/Outside
			Sulfuric Acid Plant #300	112.2	Flanges, Valves & Lines	Fug	Inside/Outside
			Sulfuric Acid Plant #400	116.0	Rail Car Steaming	Fug	Car Lids
			Sulfuric Acid Plant #400	117.0	Rail Car Dumping	Fug	Dump Pits
			Sulfuric Acid Plant #300	1550.0	Day Storage Tank – 93%	Pt	Outside
			Sulfuric Acid Plant #300	1551.0	Day Storage Tank – 98%	Pt	Outside
			Sulfuric Acid Plant #400	1552.0	Day Storage Tank – 93%	Pt	Outside
			Sulfuric Acid Plant #400	1553.0	Day Storage Tank – 98%	Pt	Outside
3.0	Phosphoric Acid Plant Stack	10	Phosphoric Acid Plant	200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	202.0	Digester Hot Wells	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	203.0	Vacuum Pumps	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	203.1	Digester Flash Cooler Vacuum Pumps	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	203.2	Belt Filter Vacuum Pumps	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	204.0	Belt Filter Filtrate Cans	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	209.0	Belt Filters	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	212.0	Phos-Acid Reactor	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	215.0	Evaporator Hot Wells	Pt	Belt Filter Scrub Stk
			Phosphoric Acid Plant	226.0	Digester Flash Cooler Precondenser Cans	Pt	Belt Filter Scrub Stk
4.0	Phosphoric Acid Plant Fugitives and Vents	Subset of group 10	Phosphoric Acid Plant	207.0	Sumps (several)	Fug	Inside/Outside
			Phosphoric Acid Plant	210.0	Belt Filters	Fug	Inside
			Phosphoric Acid Plant	227.0	Pneumatic Transfer Vent	Pt	Outside Vent

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
4.0	*(cont.)*		Phosphoric Acid Plant	230.0	Phosphoric Acid Plant Fugitives	Fug	Inside
5.0	Phosphoric Acid Tank Farm Scrubber	Subset of group 10	Phosphoric Acid Plant	229.0	Tank Farm Scrubber	Pt	T.F. Scrubber Stack
6.0	Tank Farm Area Fugitives	Subset of group 10	Phosphoric Acid Plant	223.0	West End Sump	Fug	Outside
			Phosphoric Acid Plant	228.0	#53 Tank Sump	Fug	Outside
			Phosphoric Acid Plant	1421.0	Gyp Thickner Overflow (E & W)	Fug	Outside
			Phosphoric Acid Plant	1700.0	Hot Pit Overflow (East) Pond	Fug	Pond Surface
8.0	Ammonia Storage Fugitives	Subset of group 10	Tanks - NH_3 Plant	1441.0	Low Pressure NH_3 Storage	Pt	Outside Vent
			Tanks - NH_3 Plant	1447.0	Ammonia Bullet Stor. (E & W)	Pt	Bullet Storage Tank
12.0	Ammonia Storage Flare	Subset of group 10	Ammonia Refrig./Storage	378.0	Ammonia Flare	Pt	Amonia Flare Stack
13.0	Granulation #1 Dryer Stack	5	Granulation #1	400.0	Dryer	Pt	Dryer Stack
			Granulation #1	404.0	Dryer Scrubber Tank	Pt	Dryer Stack
14.0	Granulation #1 Reactor/Granulator Stack	5	Granulation #1	401.0	Granulator	Pt	Reac/Gran Stack
			Granulation #1	403.0	Reactor	Pt	Reac/Gran Stack
			Granulation #1	405.0	Reac/Gran Scrubber Tank	Pt	Reac/Gran Stack
15.0	Granulation #1 Baghouse Stack	5	Granulation #1	406.0	Cooler	Pt	Dryer Burner
			Granulation #1	407.1	Polishing Screen	Pt	Baghouse Stack
			Granulation #1	408.1	Cage Mills	Pt	Baghouse Stack
			Granulation #1	409.1	Conveyor to Product Elevator	Pt	Baghouse Stack
			Granulation #1	411.1	Fines Drag	Pt	Baghouse Stack
			Granulation #1	412.1	Elevator to Granulator	Pt	Baghouse Stack
			Granulation #1	413.1	Elevator to Screens	Pt	Baghouse Stack
			Granulation #1	414.1	Product Elevator	Pt	Baghouse Stack

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
16.0	Granulation #1 Process Fugitives	Subset of group 5	Granulation #1	410.0	Reject Hopper	Fug	Outside
			Granulation #1	416.0	Fines Drag Conveyer	Fug	Inside
			Granulation #1	418.1	Screens	Fug	Inside
			Granulation #1	418.2	Polishing Screen	Fug	Inside
			Granulation #1	418.3	Loader to Reject Hopper	Fug	Outside
			Granulation #1	418.4	Reject Hopper to Conveyor	Fug	Outside
			Granulation #1	418.5	Conveyor to Fines Drag	Fug	Inside/Outside
17.0	Granulation #1 Storage and Loadout Fugitives	5	Granulation #1 Storage	419.0	Product Dump From Overhead	Fug	Inside
			Granulation #1 Storage	420.0	Front End Loader Operation	Fug	Inside
			Granulation #1 Storage	421.0	Underground Conveyer	Fug	Loading Vents
			Granulation #1 Storage	422.0	Elevator	Fug	Inside
			Granulation #1 Storage	423.0	Crossover Belt	Fug	Outside/Covered
			Granulation #1 Storage	423.1	Screens for Crossover Belt	Fug	Inside
			Granulation #1 Storage	424.0	Bulking Loadout	Fug	Outside/Covered
18.0	Granulation #2 Tailgas Scrubber Stack	6	Granulation #2	450.0	Reactor	Pt	T.G. Scrubber
			Granulation #2	451.0	Granulator	Pt	T.G. Scrubber
			Granulation #2	453.0	Dryer	Pt	T.G. Scrubber
19.0	Granulation #2 Baghouse Stack	6	Granulation #2	461.1	Recycle Drag Conveyor	Pt	Baghouse Stack
			Granulation #2	462.1	Reject Hopper	Pt	Baghouse Stack
			Granulation #2	463.1	Conveyor to Storage	Pt	Baghouse Stack
			Granulation #2	464.1	Screens	Pt	Baghouse Stack
			Granulation #2	464.2	Polishing Screen	Pt	Baghouse Stack
			Granulation #2	465.1	Elevator to Granulator	Pt	Baghouse Stack
			Granulation #2	466.1	Elevator to Screens	Pt	Baghouse Stack
			Granulation #2	467.1	Product Elevator	Pt	Baghouse Stack
			Granulation #2	470.3	Cooler	Pt	Baghouse Stack
20.0	Granulation #2 Process Fugitives	Subset of group 6	Granulation #2	460.0	Scrubber Sump	Fug	Outside

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
20.0	*(cont.)*		Granulation #2	470.1	Station 8 Sump	Fug	Outside
			Granulation #2	470.2	Cage Mills	Fug	Outside
			Granulation #2	470.4	Cooler	Fug	Outside
21.0	Granulation #2 Storage and Loadout Fugitives	6	Granulation #2 Storage	471.0	Product Dump From Overhead	Fug	Inside
			Granulation #2 Storage	472.0	Front End Loader Operation	Fug	Inside
			Granulation #2 Storage	473.0	Underground Conveyer	Fug	Loading Vents
			Granulation #2 Storage	474.0	Elevator	Fug	Inside
			Granulation #2 Storage	475.0	Crossover Belt	Fug	Outside/Covered
			Granulation #2 Storage	476.0	Bulking Loadout	Fug	Outside/Covered
			Granulation #2 Storage	477.0	Screens	Fug	Inside
22.0	Granulation #3 Stacks	7	Granulation #3	700.0	Mixer	Pt	Gran. #3 Stack
			Granulation #3	701.0	Blender/Granulator	Pt	Gran. #3 Stack
			Granulation #3	703.0	Blunger	Pt	Gran. #3 Stack
			Granulation #3	706.1	Limestone Bin Augers	Pt	Gran. #3 Stack
			Granulation #3	707.1	Hardy Scale	Pt	Gran. #3 Stack
			Granulation #3	708.2	Screens	Pt	Gran. #3 Stack
			Granulation #3	708.3	Rotex Screen (Conveyors)	Pt	Gran. #3 Stack
			Granulation #3	709.1	Fines Loadout (Recycle Drag)	Pt	Gran. #3 Stack
			Granulation #3	710.1	Production Elevator (screen feed elevator)	Pt	Gran. #3 Stack
			Granulation #3	712.1	Reject Elevator	Pt	Gran. #3 Stack
			Granulation #3	713.0	Cage Mill	Pt	Gran. #3 Stack
			Granulation #3	720.0	Dryer	Pt	Gran. #3 Stack
			Granulation #3	724.0	Diatomaceous Earth Silo	Pt	DE Filter Stack
			Granulation #3	725.0	Defluorination Reactors	Pt	Gran. #3 Stack
23.0	Granulation #3 Limestone Silos	7	Granulation #3	705.0	Limestone Bins	Pt	Limestone Baghouse(s)
24.0	Granulation #3 Process Fugitives	Subset of group 7	Granulation #3	715.0	Main Stack Sump	Fug	Outside

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
24.0	*(cont.)*		Granulation #3	717.0	Feed Acid Sump	Fug	Inside
			Granulation #3	719.0	Dryer Crossover Belt	Fug	Inside
25.0	Granulation #3 Storage and Loadout Fugitives	7	South Gran. #3 Storage	750.0	Conveying	Fug	Inside
			South Gran. #3 Storage	751.0	Conveyor Drop	Fug	Inside
			South Gran. #3 Storage	752.0	Front End Loader Operations	Fug	Inside
			South Gran. #3 Storage	753.0	Bulking Elevator	Fug	Inside
			South Gran. #3 Storage	754.0	Crossover Belt	Fug	Outside
			South Gran. #3 Storage	755.0	East Dry Bulking	Fug	Outside
			North Gran. #3 Storage	770.0	Conveying	Fug	Inside
			North Gran. #3 Storage	771.0	Conveyor Drop	Fug	Inside
			North Gran. #3 Storage	772.0	Front End Loader Operations	Fug	Inside
			North Gran. #3 Storage	773.0	Bulking Elevator	Fug	Inside
			North Gran. #3 Storage	774.0	Crossover Belt	Fug	Outside
			North Gran. #3 Storage	775.0	North TSP Bulking	Fug	Outside
26.0	Ammonium Sulfate Dryer Stack	2	Ammonium Sulfate	500.0	Dryer	Pt	Dryer Stack
27.0	Ammonium Sulfate Cooler Stack	2	Ammonium Sulfate	501.0	Cooler	Pt	Cooler Stack
			Ammonium Sulfate	504.1	Cooler Elevator	Pt	Cooler Stack
28.0	Ammonium Sulfate Process Fugitives	2	Ammonium Sulfate	502.0	Rotex Screener	Fug	Outside Vent
			Ammonium Sulfate	505.0	Product Elevator	Fug	Inside
			Ammonium Sulfate	506.0	Fines Tank	Fug	Vent
			Ammonium Sulfate	511.0	Centrifuge	Fug	Inside Vent
			Ammonium Sulfate	512.0	Fines Conveyer Belt	Fug	Inside
			Ammonium Sulfate	513.0	Conveyer to Storage Dome	Fug	Inside/Outside
29.0	Ammonium Sulfate Storage and Loadout Fugitives	2	Ammo-Sulfate Strg. Dome	550.0	Storage Dome Drop	Fug	Inside/Roof Vent
			Ammo-Sulfate Strg. Dome	551.0	Front End Loader Operations	Fug	Inside/Roof Vent
			Ammo-Sulfate Strg. Dome	551.1	Screen	Fug	Inside

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
29.0	*(cont.)*		Ammo-Sulfate Strg. Dome	552.0	Product Elevator	Fug	Inside/Roof Vent
			Ammo-Sulfate Strg. Dome	553.0	Crossover Belt	Fug	Outside/Covered
			Ammo-Sulfate Strg. Dome	554.0	Product Loadout	Fug	Outside/Covered
33.0	Water Reclaim System Cooling Towers	12	Water Reclaim	908.0	North Cooling Towers	Pt	Fan Exhuast
			Water Reclaim	909.0	West Cooling Towers	Pt	Fan Exhuast
			Water Reclaim	910.0	East Cooling Towers	Pt	Fan Exhuast
34.0	Water Reclaim System Fugitives	Subset of group 10	Phosphoric Acid Plant	218.0	#1 Hot Pit	Fug	Outside
			Phosphoric Acid Plant	220.0	Hot Pit / Cooling Tower Overflow	Fug	Pool Surface
			Phosphoric Acid Plant	221.0	Gypsum Thickners	Fug	Outside
36.0	Babcock & Wilcox Boiler (1995)	4	Boilers	1002.0	Babcock & Wilcox Boiler (BW1)	Pt	BW1 Main Stack
37.0	Miscellaneous Generators		Boilers	1003.0	Standby Diesel Generator (450 KW)	Pt	S. Wall Blr. Bldg.
			Slurry Receiving	1216.1	Standby Diesel Generator (400 KW)	Pt	Roof Vent/Stack
38.0	Babcock & Wilcox Boiler (2001)	3	Boilers	1004.0	Babcock & Wilcox Boiler (BW2)	Pt	BW2 Main Stack
40.0	Super Phosphoric Acid Plant Scrubber Stack	13	Super Phosphoric Acid	1102.0	Product Tank	Pt	Scrubber Stack
			Super Phosphoric Acid	1104.0	Leaf Filters	Pt	Scrubber Stack
			Super Phosphoric Acid	1108.1	Evaporators	Pt	Scrubber Stack
			Super Phosphoric Acid	1108.2	Sump #6	Pt	Scrubber Stack
			Super Phosphoric Acid	1109.0	Oxidizer	Pt	Scrubber Stack
			Super Phosphoric Acid	1112.0	Evaporator Feed Tank	Pt	Scrubber Stack
			Super Phosphoric Acid	1113.0	Effluent Tank	Pt	Scrubber Stack
40.1	Super Phosphoric Acid Plant Fugitives	Subset of group 13	Super Phosphoric Acid	1102.1	Product Tank	Fug	Outside
			Super Phosphoric Acid	1108.3	Evaporators	Fug	Outside
			Super Phosphoric Acid	1108.4	Sump #6	Fug	Outside
			Super Phosphoric Acid	1112.1	Evaporator Feed Tank	Fug	Outside
			Super Phosphoric Acid	1113.1	Evaporator Seal Cans	Fug	Outside

Table 7
Source Group Identifications

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source Group	Source ID	Source Name	Type	Emission Point
40.1	*(cont.)*		Tanks - Liquid Plant	1506.0	Scrubber Stack	Pt	Outside
			Tanks - Liquid Plant	1506.1	Deflo – Dilution Tank	Fug	Outside
			Super Phosphoric Acid	1521.0	#7 Sump	Fug	Outside
			Super Phosphoric Acid	1522.0	North Effluent Sump	Fug	Outside
			Super Phosphoric Acid	1523.0	#4 Sump	Fug	Outside
			Super Phosphoric Acid	1524.0	SPA Aging Tank	Fug	Outside
			Super Phosphoric Acid	1525.0	#6 Sump	Fug	Outside
41.0	Roads	11	Paved Roads	1601.0	Paved Segment 1	Line	Fug Dust
			Paved Roads	1602.0	Paved Segment 2	Line	Fug Dust
			Paved Roads	1603.0	Paved Segment 3	Line	Fug Dust
			Paved Roads	1604.0	Paved Segment 4	Line	Fug Dust
			Paved Roads	1605.0	Paved Segment 5	Line	Fug Dust
			Paved Roads	1606.0	Paved Segment 6	Line	Fug Dust
			Paved Roads	1607.0	Paved Segment 7	Line	Fug Dust
			Paved Roads	1608.0	Paved Segment 8	Line	Fug Dust
			Paved Roads	1609.0	Paved Segment 9	Line	Fug Dust
			Paved Roads	1610.0	Paved Segment 10	Line	Fug Dust
			Unpaved Roads	1651.0	Unpaved Segment 1	Line	Fug Dust
			Unpaved Roads	1652.0	Unpaved Segment 2	Line	Fug Dust
			Unpaved Roads	1653.0	Unpaved Segment 3	Line	Fug Dust
			Unpaved Roads	1654.0	Unpaved Segment 4	Line	Fug Dust
			Unpaved Roads	1655.0	Unpaved Segment 5	Line	Fug Dust
			Unpaved Roads	1656.0	Unpaved Segment 6	Line	Fug Dust
42.0	Gypsum Stack/Pond and Transport	8	Tanks – Gypsum Stack	1508.0	Gypsum Decant Tank	Fug	Outside
			Impoundments – Gypsum Stack	1701.0	Gypsum Stack Pond	Fug	Pond Surface
			Gypsum Stack	1713.0	Wind-Blown Dust	Fug	Stack Surface
43.0	Construction/Demolition Debris Landfill Operation		Landfill	1711.1	Earth Moving Activities - Operation	Fug	Outside

Table 8
Proposed Tier I Permit Limits Based on Updated Emission Estimates
JR Simplot Don Siding Plant, Pocatello, ID

Emissions Inventory Group ID	Emissions Inventory Group Name	Tier I Permit Group ID	Source ID	Source Name	Pollutant	Old Calculation Variable		New Calculation Variable		Existing Tier I Permit Limit	Revised Tier I Permit Limit	Basis for Change in Variable and Permit Limit
						Value	Units	Value	Units			
13, 14, 15	Granulation #1 Dryer Stack, Granulation #1 Reactor/Granulator Stack, Granulation #1 Baghouse Stack	5	400	Dryer (*permit limit applies to all stacks combined*)	CO	31.5	lb/MMscf	84	lb/MMscf	0.37 lb/hr, 1.6 tpy	1.62 lb/hr, 7.08 tpy	Updated emission factor (AP-42), assumes maximum heat input at 20 MMBTU/hr (0.01923 MMscf/hr)
					NO_x	126	lb/MMscf	100	lb/MMscf	1.44 lb/hr, 6.3 tpy	1.92 lb/hr, 8.42 tpy	Updated emission factor (AP-42), assumes maximum heat input at 20 MMBTU/hr (0.01923 MMscf/hr)
					SO_2	0.3885	lb/MMscf	0.3	lb/MMscf	0.004 lb/hr, 0.019 tpy	0.01 lb/hr, 0.03 tpy	Updated emission factor (AP-42) and scrubber efficiency of 50%, assumes maximum heat input at 20 MMBTU/hr (0.01923 MMscf/hr)
					CO, NO_X, SO_2	101.27	MMscf/yr	168	MMscf/yr	See Above	See Above	Based on updated burner capacity, 8,760 hrs/yr.
18, 19	Granulation #2 Tailgas Scrubber Stack, Granulation #2 Baghouse Stack	6	453	Dryer (*permit limit applies to all stacks combined*)	CO	31.5	lb/MMscf	84	lb/MMscf	0.41 lb/hr, 1.8 tpy	1.62 lb/hr, 7.08 tpy	Updated emission factor (AP-42), assumes maximum heat input at 20 MMBTU/hr (0.01923 MMscf/hr)
					NO_x	126	lb/MMscf	100	lb/MMscf	1.69 lb/hr, 7.4 tpy	1.92 lb/hr, 8.42 tpy	Updated emission factor (AP-42), assumes maximum heat input at 20 MMBTU/hr (0.01923 MMscf/hr)
					SO_2	0.1155	lb/MMscf	0.3	lb/MMscf	0.0016 lb/hr, 0.007 tpy	0.01 lb/hr, 0.03 tpy	Updated emission factor (AP-42) and scrubber efficiency of 50%, assumes maximum heat input at 20 MMBTU/hr (0.01923 MMscf/hr)
					CO, NO_X, SO_2	118.15	MMscf/yr	168	MMscf/yr	See Above	See Above	Based on updated burner capacity, 8,760 hrs/yr.
26, 27	Ammonium Sulfate Dryer Stack, Ammonium Sulfate Cooler Stack	2	500	Dryer (*permit limit applies to all stacks combined*)	CO	31.5	lb/MMscf	84	lb/MMscf	0.07 lb/hr, 0.3 tpy	0.25 lb/hr, 1.06 tpy	Updated emission factor (AP-42), assumes maximum heat input at 3 MMBTU/hr (0.002885 MMscf/hr)
					NO_x	126	lb/MMscf	100	lb/MMscf	0.25 lb/hr, 1.1 tpy	0.29 lb/hr, 1.27 tpy	Updated emission factor (AP-42), assumes maximum heat input at 3 MMBTU/hr (0.002885 MMscf/hr)
					SO_2	0.3885	lb/MMscf	0.3	lb/MMscf	0.0007 lb/hr, 0.003 tpy	0.001 lb/hr, 0.004 tpy	Updated emission factor (AP-42) and scrubber efficiency of 50%, assumes maximum heat input at 3 MMBTU/hr (0.002885 MMscf/hr)
					CO, NO_X, SO_2	16.85	MMscf/yr	25.3	MMscf/yr	See Above	See Above	Based on updated burner capacity, 8,760 hrs/yr.
41	Plant Roads	11	All in Group	All in Group	PM	Old AP-42		New AP-42		3.12 lb/hr, 13.65 tpy	14.10 lb/hr, 46.65 tpy	AP-42 methodology for estimating road dust emissions has changed
					PM_{10}	Old AP-42		New AP-42		1.94 lb/hr, 8.48 tpy	5.10 lb/hr, 16.85 tpy	AP-42 methodology for estimating road dust emissions has changed

Note: None of these proposed changes in permit limits reflects a change in equipment or actual emissions.

Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
For assistance, call the Air Permit Hotline: 1-877-5PERMIT

Form #AQ-F-P004
Revision: 1
12/15/06

AIR QUALITY TIER I OPERATING PERMIT APPLICATION

SECTION 1: GENERAL INFORMATION

Company & Division Name: J.R. Simplot Company

Company Mailing Address: PO Box 912

City: Pocatello **State:** ID **Zip:** 83204

Company Environmental Contact Name: Kirk Adkins KAdkins@Simplot.com

Title: EH&S Manager **Phone:** 208-234-5470

Company Owner or Responsible Official Name: Del Butler

Title: Plant Manager **Phone:** 208-234-5410

Exact Plant Location: Section 18 R-34-E, T-6-S; 5½ Section 7 R-34-E T-6-S

General Nature of Business: Manufacture of phosphate and sulfate commercial products

No. Full-time Employees: 500 **Property Area (acres):** 900

Reason for Application:

- ☐ Initial Tier I permit to operate
- ☒ Renewal Tier I permit to operate
- ☐ Modification/Amendment of existing Tier I permit to operate
- ☐ Change of ownership or location

Distance to Nearest State Border (miles): 64 miles

Primary SIC: 2874 **Secondary SIC:** 2819

Plant Location County: Power **Elevation (ft):** 4448

UTM Zone: 12

UTM (X) Coordinate (kM): 375,462 **UTM (Y) Coordinate (kM):** 4,751,476

LIST ALL FACILITIES WITHIN THE STATE THAT ARE UNDER YOUR CONTROL OR UNDER COMMON CONTROL AND HAVE EMISSIONS TO THE AIR. IF NOT, SO STATE.

Name of Facility	Location of Other Facility
Caldwell Potato Processing Plant	Caldwell, Idaho
WSI – Diversified Products	Caldwell, Idaho
Nampa Potato Processing Plant	Nampa, Idaho
Aberdeen Potato Processing Plant	Aberdeen, Idaho
Smoky Canyon Mine	Smoky Canyon Mine, Idaho
Double J Milling (joint owner)	Mtn Home, Idaho

Certification of Truth, Accuracy, and Completeness (by Responsible Official)
I hereby certify that based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete in accordance with IDAPA 58.01.01.123-124.

Del Butler — *Responsible Official Signature*

Plant Manager — *Responsible Official Title*

6-17-07 — *Date*

Del Butler
Print or Type Responsible Official Name

APPENDIX B
COMPLIANCE ASSURANCE MONITORING PLANS

Compliance Assurance Monitoring Plan
Granulation 1 Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Polishing Screen, Fines Drag, Elevator to Granulator, Elevator to Screens, Reject Conveyor to Fines Drag
Emission Identification:	407.1, 411.1, 412.1, 413.1, 414.2
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	Tier I permit Condition 7.1, IDAPA 58.01.01.702, RACT
Emission Standard:	23.8 lb/hr, 104.26 tons/year PM limit from all sources venting to the Granulation No. 1 process stacks. 10.9 lb/hr, 47.7 tons/year PM limit from the Reactor/Granulator stack, Dryer stack and Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 7.2, RACT
Emission Standard:	19.52 lb/hr, 85.48 tons/year PM_{10} limit from all sources venting to the Granulation No. 1 process stacks. 10.9 lb/hr, 47.7 tons/year PM_{10} limit from the Reactor/Granulator stack, Dryer stack and Baghouse stack.

Monitoring Requirements: pressure drop across the baghouse

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

TABLE A. MONITORING APPROACH

	Indicator No. 1
I. Indicator	Pressure drop across the baghouse
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.
II. Indicator Range	To be determined.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.
B. Verification of Operational Status	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.
D. Monitoring Frequency	The pressure drop is monitored continuously.
E. Data Collection Procedure	At minimum, the pressure drop is manually recorded once per day.
F. Averaging Period	None

Compliance Assurance Monitoring Plan
Granulation 2 Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Recycle Drag Conveyor, Screens, Polishing Screen, Elevator to Granulator, Elevator to Screens, Product Elevator
Emission Identification:	461.1, 464.1, 464.2, 465.1, 466.1, 467.1
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	Tier I permit Condition 8.1, IDAPA 58.01.01.702, RACT
Emission Standard:	If process weight (PW) is less than 17,000 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 17,000 lb/hr $E=1.12(PW)^{0.27}$ 22.02 lb/hr, 96.47 tons/year PM limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM limit from the Tailgas scrubber stack and the Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 8.2, RACT
Emission Standard:	18.06 lb/hr, 79.12 tons/year PM_{10} limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM_{10} limit from the Tailgas scrubber stack and the Baghouse stack.

Monitoring Requirements: Pressure drop across the baghouse

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

TABLE A. MONITORING APPROACH

	Indicator No. 1
I. Indicator	Pressure drop across the baghouse
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.
II. Indicator Range	To be determined.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.
B. Verification of Operational Status	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.
D. Monitoring Frequency	The pressure drop is monitored continuously.
E. Data Collection Procedure	At a minimum, the pressure drop is manually recorded once per day.
F. Averaging Period	None

Compliance Assurance Monitoring Plan
Granulation 2 Cooler Baghouse

I. Background

A. Emission Unit

Process Emission Unit: Cooler

Emission Identification: 470.3

Source/Facility: J.R. Simplot Co. – Don Siding Plant

Permit Number: T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant: Particulate Matter

Regulation Number: Tier I permit Condition 8.1, IDAPA 58.01.01.702, RACT

Emission Standard: If process weight (PW) is less than 17,000 lb/hr
$E=0.045(PW)^{0.60}$

If process weight (PW) is greater than 17,000 lb/hr
$E=1.12(PW)^{0.27}$

22.02 lb/hr, 96.47 tons/year PM limit from all sources venting to the Granulation No. 2 process stacks.
10.7 lb/hr, 46.9 ton/year PM limit from the Tailgas scrubber stack and the Baghouse stack.

Pollutant: Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})

Regulation Number: Tier I permit Condition 8.2, RACT

Emission Standard: 18.06 lb/hr, 79.12 tons/year PM_{10} limit from all sources venting to the Granulation No. 2 process stacks.
10.7 lb/hr, 46.9 ton/year PM limit from the Tailgas scrubber stack and the Baghouse stack.

Monitoring Requirements: Pressure drop across the baghouse

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

TABLE A. MONITORING APPROACH

	Indicator No. 1
I. Indicator	Pressure drop across the baghouse
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.
II. Indicator Range	To be determined.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.
B. Verification of Operational Status	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.
D. Monitoring Frequency	The pressure drop is monitored continuously.
E. Data Collection Procedure	At a minimum, the pressure drop is manually recorded once per day.
F. Averaging Period	None

Compliance Assurance Monitoring Plan
Granulation 3 Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Screens, Rotex Screen, Fines Loadout, Production elevator, Reject Elevator
Emission Identification:	708.2, 708.3, 709.1, 710.1, 712.1
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter (PM)
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 9.1
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$
	If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$
	7.0 lb/hr, 30.7 tons/year PM limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 9.2.1
Emission Standard:	5.7 lb/hr, 25.0 tons/year PM_{10} limit from all sources venting to the Granulation No. 3 stack.

Monitoring Requirements: pressure drop across the baghouse

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

TABLE A. MONITORING APPROACH

	Indicator No. 1
I. Indicator	Pressure drop across the baghouse
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.
II. Indicator Range	To be determined.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.
B. Verification of Operational Status	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.
D. Monitoring Frequency	The pressure drop is monitored continuously.
E. Data Collection Procedure	At a minimum, the pressure drop is manually recorded once per day.
F. Averaging Period	None

Compliance Assurance Monitoring Plan
Granulation 3 Entoleter Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	Granulation 3 Mixer, Blunger, and Dryer
Emission Identification:	700.0, 703.0, 720.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter (PM)
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 9.1
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$ 7.0 lb/hr, 30.7 tons/year PM limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 9.2.1
Emission Standard:	5.7 lb/hr, 25.0 tons/year PM_{10} limit from all sources venting to the Granulation No. 3 stack.

Monitoring Requirements: pressure drop across the scrubber, liquid flow rate through the scrubber, fresh water flow to the scrubber, and scrubber duct spray water flow.

C. Capture and Control Technology

Wet Scrubber - Entoleter Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occurred. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

Additionally, the April 13, 2007 Granulation No. 3 Consent Order (for Case No. E-040018 and E-050002) specifies additional performance indicator provisions for the Entoleter Scubber. These include requirements that the fresh water flow to the scrubber does not drop below 10 gallons per minute (gpm) while producing 21P and 18.5P, fresh water flow to the scrubber does not drop below 32 gpm while producing 0-45-0, the total scrubber flow does not drop below 600 gpm, and the scrubber duct spray water flow does not drop below 250 gpm. All monitoring data will be determined based upon daily averaging of data collected during operations on approximately four hour intervals.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with flow meter.
II. Indicator Range	To be determined.	An excursion is defined as a water flow rate less than 600 gallons per minute, as required by the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order. Excursions trigger an inspection, corrective action and reporting requirement.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	The differential pressure is manually recorded once per day.	The liquid flow rate is manually recorded every four hours.
F. Averaging Period	None	Daily average

	Indicator No. 3	Indicator No. 4
IV. Indicator	Fresh water flow to the scrubber	Scrubber duct spray water flow
Measurement Approach	The fresh water flow rate is monitored with flow meter.	The liquid flow rate is monitored with flow meter.
V. Indicator Range	An excursion is defined as fresh water flow less than 10 gallons per minute while producing 21 P and 18.5 P, and less than 32 gallons per minute while producing 0-45-0, as required by the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order. Excursions trigger an inspection, corrective action and reporting requirement.	An excursion is defined as a duct spray water flow rate less than 250 gallons per minute, as required by the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order. Excursions trigger an inspection, corrective action and reporting requirement.
VI. Performance Criteria A. Data Representativeness	A liquid flow meter is used to monitor the fresh water flow rate.	A liquid flow meter is used to monitor the duct spray flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The flow meter will be calibrated.	The flow meter will be calibrated.
D. Monitoring Frequency	The fresh water flow is monitored continuously.	The scrubber duct spray water flow is monitored continuously.
E. Data Collection Procedure	The fresh water flow is manually recorded every four hours.	The scrubber duct spray water flow is manually recorded every four hours.
F. Averaging Period	Daily average	Daily average

Compliance Assurance Monitoring Plan
Granulation 3 Defluorination Scrubber

I. Background

A. Emission Unit

Process Emission Unit: Defluorination reactors

Emission Identification: 725.0

Source/Facility: J.R. Simplot Co. – Don Siding Plant

Permit Number: T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant: Particulate Matter (PM)

Regulation Number: IDAPA 58.01.01.701, Tier I permit Condition 9.1

Emission Standard: If process weight (PW) is less than 9,250 lb/hr
$E=0.045(PW)^{0.60}$

If process weight (PW) is greater than 9,250 lb/hr
$E=1.10(PW)^{0.25}$

7.0 lb/hr, 30.7 tons/year PM limit from all sources venting to the Granulation No. 3 stack.

Pollutant: Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})

Regulation Number: Tier I permit Condition 9.2.1

Emission Standard: 5.7 lb/hr, 25.0 tons/year PM_{10} limit from all sources venting to the Granulation No. 3 stack.

Monitoring Requirements: pressure drop across the scrubber and liquid flow rate through the scrubber

C. Capture and Control Technology

Wet Scrubber - Defluorination Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occurred. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with flow meter.
II. Indicator Range	To be determined.	To be determined.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	At a minimum, the differential pressure will be manually recorded once per day.	At a minimum, the liquid flow rate will be manually recorded once per day.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Sulfuric Acid Plant No. 300 AmmSOx Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	#300 Sulfuric Acid Plant Main Stack
Emission Identification:	100.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Sulfuric Acid Mist
Regulation Number:	40 CFR 60.83(1), Tier I permit Condition 16.2
Emission Standard:	3.0 lb/hr (calculated as 24 hour rolling average), 13.0 tons/year, 0.15 lbs/ton of 100% sulfuric acid produced
Pollutant:	Particulate Matter (PM)
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 16.3.2
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})

Monitoring Requirements: pressure drop across the scrubber and liquid flow rate through the scrubber

C. Capture and Control Technology

Wet Scrubber - AmmSOx Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for sulfuric acid mist and particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate sulfuric acid mist and particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occured. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with a flow meter.
II. Indicator Range	To be determined.	To be determined.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	At a minimum, the differential pressure is manually recorded once per day.	At a minimum, the liquid flow rate is manually recorded once per day.
F. Averaging Period	None	None

APPENDIX C
AIR EMISSIONS INVENTORY

Summary of Facility-Wide Actual Estimated Emissions
J.R. Simplot Don Plant, Pocatello, Idaho

Emissions Inventory Group ID:			1.0	2.0	3.0	4.0	5.0	6.0	8.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0
Emissions Inventory Group Name:		Facility-Wide Total	Sulfuric Acid Plant #300 & #400 Stacks	Sulfuric Acid Plant #300 & #400 Fugitives	Phosphoric Acid Plant Stack	Phosphoric Acid Plant Fugitives	Phosphoric Acid Tank Farm Scrubber	Tank Farm Area Fugitives	Ammonia Storage Fugitives	Ammonia Storage Flare	Granulation #1 Dryer Stack	Granulation #1 Reactor/Granulator Stack	Granulation #1 Baghouse Stack	Granulation #1 Process Fugitives	Granulation #1 Storage and Loadout Fugitives	Granulation #2 Tailgas Scrubber Stack	Granulation #2 Baghouse Stack	Granulation #2 Process Fugitives	Granulation #2 Storage and Loadout Fugitives	Granulation #3 Stacks	Granulation #3 Limestone Silos
Tier 1 Permit Group ID:			14, 15	Subset of groups 14 and 15	10	Subset of group 10	Subset of group 10	Subset of group 10	Subset of group 10	Subset of group 10	5	5	5	Subset of group 5	5	6	6	Subset of group 6	6	7	7
Pollutant ID	**Pollutant Name**	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
1	2-Methylnaphthalene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	--	<0.0005	--
2	Acetaldehyde	0.001	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Anthracene	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Antimony	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	Arsenic	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
6	Benzene	0.001	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
7	Benzo(a)anthracene	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	Beryllium	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	Cadmium	0.003	--	--	<0.0005	<0.0005	<0.0005	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.0005	0.002	<0.0005	<0.0005	<0.0005
10	Chromium	0.003	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	0.001	0.002	<0.0005	<0.0005	--
11	Chrysene	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	CO	35.28	--	--	--	--	--	--	--	0.066	3.207	--	--	--	--	3.298	--	--	--	5.151	--
13	Cobalt	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
14	Dichlorobenzene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
15	Fluoranthene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
16	Fluorene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
17	Fluorides	154.0	--	--	0.987	0.064	1.958	0.330	--	--	0.168	0.391	0.033	0.039	0.047	0.128	0.151	0.349	0.015	4.668	--
18	Formaldehyde	0.024	--	--	--	--	--	--	--	--	0.003	--	--	--	--	--	--	--	--	0.005	--
19	H2S	39.51	--	39.508	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	H2SO4	17.58	17.583	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Hexane	0.610	--	--	--	--	--	--	--	--	0.069	--	--	--	--	0.071	--	--	--	0.110	--
22	Lead	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
23	Manganese	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
24	Mercury	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
25	Naphthalene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
26	NH3	151.1	0.361	--	--	--	--	--	10.763	--	--	86.562	--	--	--	21.226	--	--	--	--	--
27	Nickel	0.004	--	--	--	--	--	--	--	--	<0.0005	<0.0005	--	--	--	0.001	0.001	0.002	<0.0005	<0.0005	<0.0005
28	NOx	106.5	50.171	--	--	--	--	--	--	16.210	3.818	--	--	--	--	--	--	--	--	6.132	--
29	Phenanthrene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
30	PM	622.9	44.577	--	7.308	1.476	2.313	--	--	--	4.865	1.764	0.855	2.140	3.426	12.343	6.317	22.528	0.992	9.264	0.102
31	PM10	194.7	36.553	--	5.992	1.205	1.896	--	--	--	3.989	1.446	0.701	0.321	0.514	10.121	5.180	3.379	0.149	7.598	0.087
32	Pyrene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	--	<0.0005	--
33	Reduced S	15.30	--	--	13.909	1.391	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	SO2	1579.1	1526.720	24.966	26.894	--	--	--	--	--	0.011	--	--	--	--	0.012	--	--	--	0.018	--
35	Toluene	0.001	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
36	VOC	2.359	--	--	--	--	--	--	--	--	0.210	--	--	--	--	0.216	--	--	--	0.337	--
37	Xylenes	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Summary of Facility-Wide Actual Estimated Emissions
J.R. Simplot Don Plant, Pocatello, Idaho

Emissions Inventory Group ID:		24.0	25.0	26.0	27.0	28.0	29.0	33.0	34.0	36.0	37.0	38.0	40.0	40.1	41.0	42.0	43.0
Emissions Inventory Group Name:		Granulation #3 Process Fugitives	Granulation #3 Storage and Loadout Fugitives	Ammonium Sulfate Dryer Stack	Ammonium Sulfate Cooler Stack	Ammonium Sulfate Process Fugitives	Ammonium Sulfate Storage and Loadout Fugitives	Water Reclaim System Cooling Towers	Water Reclaim System Fugitives	Babcock & Wilcox Boiler	Miscellaneous Generators	HPB&W Boiler	Super Phosphoric Acid Plant Scrubber Stack	Super Phosphoric Acid Plant Fugitives	Roads	Gypsum Stack/Pond and Transport	Construction/Demolition Debris Landfill Operation
Tier 1 Permit Group ID:		Subset of group 7	7	2	2	2	2	12	Subset of group 10	4		3.0	13	Subset of group 13	11	8	
Pollutant ID	Pollutant Name	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
1	2-Methylnaphthalene	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
2	Acetaldehyde	--	--	--	--	--	--	--	--	--	0.001	--	--	--	--	--	--
3	Anthracene	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--
4	Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	Arsenic	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
6	Benzene	--	--	<0.0005	--	--	--	--	--	<0.0005	0.001	<0.0005	--	--	--	--	--
7	Benzo(a)anthracene	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--
8	Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	Cadmium	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	<0.0005	--	<0.0005	--	--	--	--	--
10	Chromium	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
11	Chrysene	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--
12	CO	--	--	0.259	--	--	--	--	--	3.653	1.310	12.264	6.076	--	--	--	--
13	Cobalt	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
14	Dichlorobenzene	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
15	Fluoranthene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
16	Fluorene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
17	Fluorides	0.002	0.013	--	--	--	--	82.662	0.070	--	--	--	0.008	0.001	--	61.905	--
18	Formaldehyde	--	--	<0.0005	--	--	--	--	--	0.003	0.002	0.011	--	--	--	--	--
19	H2S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	H2SO4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Hexane	--	--	0.006	--	--	--	--	--	0.078	--	0.276	--	--	--	--	--
22	Lead	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
23	Manganese	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
24	Mercury	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
25	Naphthalene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
26	NH3	--	--	32.175	--	--	--	--	--	--	--	--	--	--	--	--	--
27	Nickel	<0.0005	<0.0005	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
28	NOx	--	--	0.309	--	--	--	--	--	2.174	6.080	21.462	0.110	--	--	--	--
29	Phenanthrene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
30	PM	0.190	1.121	1.915	2.757	0.879	0.595	430.883	--	0.330	0.427	1.165	--	--	46.647	11.339	4.406
31	PM10	0.028	0.168	1.570	2.261	0.132	0.089	86.177	--	0.330	0.427	1.165	--	--	16.854	5.508	0.842
32	Pyrene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
33	Reduced S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	SO2	--	--	0.001	--	--	--	--	--	0.026	0.400	0.092	--	--	--	--	--
35	Toluene	--	--	<0.0005	--	--	--	--	--	<0.0005	0.001	0.001	--	--	--	--	--
36	VOC	--	--	0.017	--	--	--	--	--	0.239	0.496	0.843	--	--	--	--	--
37	Xylenes	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--

Summary of Facility-Wide Maximum Estimated Emissions
J.R. Simplot Don Plant, Pocatello, Idaho

Emissions Inventory Group ID:			1.0	2.0	3.0	4.0	5.0	6.0	8.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0
Emissions Inventory Group Name:		Facility-Wide Total	Sulfuric Acid Plant #300 & #400 Stacks	Sulfuric Acid Plant #300 & #400 Fugitives	Phosphoric Acid Plant Stack	Phosphoric Acid Plant Fugitives	Phosphoric Acid Tank Farm Scrubber	Tank Farm Area Fugitives	Ammonia Storage Fugitives	Ammonia Storage Flare	Granulation #1 Dryer Stack	Granulation #1 Reactor/Granulator Stack	Granulation #1 Baghouse Stack	Granulation #1 Process Fugitives	Granulation #1 Storage and Loadout Fugitives	Granulation #2 Tailgas Scrubber Stack	Granulation #2 Baghouse Stack	Granulation #2 Process Fugitives	Granulation #2 Storage and Loadout Fugitives	Granulation #3 Stacks	Granulation #3 Limestone Silos
Tier 1 Permit Group ID:			14, 15	Subset of groups 14 and 15	10	Subset of group 10	Subset of group 10	Subset of group 10	Subset of group 10	Subset of group 10	5	5	5	Subset of group 5	5	6	6	Subset of group 6	6	7	7
Pollutant ID	Pollutant Name	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
1	2-Methylnaphthalene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	--	<0.0005	--
2	Acetaldehyde	0.002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Anthracene	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Antimony	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	Arsenic	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
6	Benzene	0.005	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
7	Benzo(a)anthracene	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	Beryllium	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	Cadmium	0.011	--	--	<0.0005	<0.0005	<0.0005	--	--	--	<0.0005	<0.0005	<0.0005	0.001	0.004	<0.0005	0.001	0.003	0.001	0.001	<0.0005
10	Chromium	0.006	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	0.001	0.003	0.001	<0.0005	--
11	Chrysene	*Negligible*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	CO	149.6	--	--	--	--	--	--	--	0.114	1.600	--	--	--	--	1.800	--	--	--	12.700	--
13	Cobalt	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
14	Dichlorobenzene	0.001	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
15	Fluoranthene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
16	Fluorene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
17	Fluorides	335.9	--	--	4.710	0.085	7.831	0.432	--	--	34.160	--	--	0.062	0.308	29.780	--	0.462	0.385	5.630	--
18	Formaldehyde	0.095	--	--	--	--	--	--	--	--	0.005	--	--	--	--	--	--	--	--	0.008	--
19	H2S	39.5	--	39.500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	H2SO4	67.8	67.750	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Hexane	2.306	--	--	--	--	--	--	--	--	0.114	--	--	--	--	0.106	--	--	--	0.182	--
22	Lead	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
23	Manganese	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
24	Mercury	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
25	Naphthalene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
26	NH3	235.7	11.000	--	--	--	--	--	10.763	--	--	140.176	--	--	--	31.938	--	--	--	--	--
27	Nickel	0.010	--	--	--	--	--	--	--	--	0.001	<0.0005	--	--	--	0.002	0.001	0.003	<0.0005	0.001	<0.0005
28	NOx	214.2	104.744	--	--	--	--	--	--	32.420	6.300	--	--	--	--	--	--	--	--	14.900	--
29	Phenanthrene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
30	PM	1138.8	57.950	--	14.800	2.989	9.251	--	--	--	104.260	--	--	3.389	30.780	96.470	--	29.753	38.490	31.900	0.898
31	PM10	463.8	47.519	--	12.130	2.440	7.585	--	--	--	85.480	--	--	0.508	11.120	79.120	--	4.463	4.630	26.200	0.763
32	Pyrene	*Negligible*	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	--	<0.0005	--
33	Reduced S	41.47	--	--	37.700	3.770	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	SO2	2276.9	2208.000	32.456	34.962	--	--	--	--	--	0.019	--	--	--	--	0.007	--	--	--	0.090	--
35	Toluene	0.005	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	<0.0005	--	--	--	<0.0005	--
36	VOC	7.592	--	--	--	--	--	--	--	--	0.349	--	--	--	--	0.325	--	--	--	0.900	--
37	Xylenes	0.001	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Summary of Facility-Wide Maximum Estimated Emissio
J.R. Simplot Don Plant, Pocatello, Idaho

Emissions Inventory Group ID:		24.0	25.0	26.0	27.0	28.0	29.0	33.0	34.0	36.0	37.0	38.0	40.0	40.1	41.0	42.0	43.0
Emissions Inventory Group Name:		Granulation #3 Process Fugitives	Granulation #3 Storage and Loadout Fugitives	Ammonium Sulfate Dryer Stack	Ammonium Sulfate Cooler Stack	Ammonium Sulfate Process Fugitives	Ammonium Sulfate Storage and Loadout Fugitives	Water Reclaim System Cooling Towers	Water Reclaim System Fugitives	Babcock & Wilcox Boiler	Miscellaneous Generators	HPB&W Boiler	Super Phosphoric Acid Plant Scrubber Stack	Super Phosphoric Acid Plant Fugitives	Roads	Gypsum Stack/Pond and Transport	Construction/Demolition Debris Landfill Operation
Tier 1 Permit Group ID:		Subset of group 7	7	2	2	2	2	12	Subset of group 10	4		3	13	Subset of group 13	11	8	
Pollutant ID	Pollutant Name	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
1	2-Methylnaphthalene	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
2	Acetaldehyde	--	--	--	--	--	--	--	--	--	0.002	--	--	--	--	--	--
3	Anthracene	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--
4	Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	Arsenic	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
6	Benzene	--	--	<0.0005	--	--	--	--	--	0.001	0.002	0.002	--	--	--	--	--
7	Benzo(a)anthracene	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--
8	Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	Cadmium	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.0005	--	--	<0.0005	--	0.001	--	--	--	--	--
10	Chromium	--	--	<0.0005	--	--	--	--	--	<0.0005	--	0.001	--	--	--	--	--
11	Chrysene	--	--	--	--	--	--	--	--	--	<0.0005	--	--	--	--	--	--
12	CO	--	--	0.300	--	--	--	--	--	51.100	2.365	61.300	18.300	--	--	--	--
13	Cobalt	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
14	Dichlorobenzene	--	--	<0.0005	--	--	--	--	--	<0.0005	--	0.001	--	--	--	--	--
15	Fluoranthene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
16	Fluorene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
17	Fluorides	0.005	0.020	--	--	--	--	173.600	0.091	--	--	--	1.620	0.034	--	76.651	--
18	Formaldehyde	--	--	0.001	--	--	--	--	--	0.021	0.003	0.057	--	--	--	--	--
19	H2S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	H2SO4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Hexane	--	--	0.020	--	--	--	--	--	0.503	--	1.380	--	--	--	--	--
22	Lead	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
23	Manganese	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
24	Mercury	--	--	<0.0005	--	--	--	--	--	<0.0005	--	<0.0005	--	--	--	--	--
25	Naphthalene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
26	NH3	--	--	41.828	--	--	--	--	--	--	--	--	--	--	--	--	--
27	Nickel	<0.0005	0.001	<0.0005	--	--	--	--	--	0.001	--	0.002	--	--	--	--	--
28	NOx	--	--	1.100	--	--	--	--	--	12.630	10.977	30.700	0.400	--	--	--	--
29	Phenanthrene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
30	PM	0.401	3.000	10.680	--	1.198	11.040	618.440	--	2.790	0.772	5.830	--	--	46.647	11.339	5.727
31	PM10	0.060	0.500	8.760	--	0.180	3.920	123.680	--	1.400	0.772	5.830	--	--	16.854	18.840	1.094
32	Pyrene	--	--	<0.0005	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	--	--
33	Reduced S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	SO2	--	--	0.003	--	--	--	--	--	0.170	0.722	0.460	--	--	--	--	--
35	Toluene	--	--	<0.0005	--	--	--	--	--	0.001	0.001	0.003	--	--	--	--	--
36	VOC	--	--	0.062	--	--	--	--	--	0.840	0.896	4.220	--	--	--	--	--
37	Xylenes	--	--	--	--	--	--	--	--	--	0.001	--	--	--	--	--	--

Emissions Inventory Group ID: 1.0
Emissions Inventory Group Name: Sulfuric Acid Plant #300 & #400 Stacks
Tier 1 Permit Group ID: 14, 15

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)			Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum		
*																		
100.0	#300 Sulfuric Acid Plant Main Stack	Point	#300 Sulfuric Stack	20	H2SO4	7,855	8,760	0.74	lb/hr	7,855	8,760	hrs/yr	3		2.9	13		1
100.0	#300 Sulfuric Acid Plant Main Stack	Point	#300 Sulfuric Stack	26	NH3	7,855	8,760	0.09	lb/hr	7,855	8,760	hrs/yr	2.5		0.4	11		1
100.0	#300 Sulfuric Acid Plant Main Stack	Point	#300 Sulfuric Stack	28	NOx	7,855	8,760	4.79	lb/hr	7,855	8,760	hrs/yr	16.0		18.8	64		2
100.0	#300 Sulfuric Acid Plant Main Stack	Point	#300 Sulfuric Stack	34	SO2	7,855	8,760	97.1	lb/hr	7,855	8,760	hrs/yr	170		381.2	750		1
100.0	#300 Sulfuric Acid Plant Main Stack	Point	#300 Sulfuric Stack	30	PM	7,855	8,760	4.03	lb/hr	7,855	8,760	hrs/yr	5.2	(b)	15.8	20.6	(d)	3
100.0	#300 Sulfuric Acid Plant Main Stack	Point	#300 Sulfuric Stack	31	PM10	7,855	8,760	3.31	lb/hr	7,855	8,760	hrs/yr	4.3	(b)	13.0	16.9	(d)	4
114.0	#400 Sulfuric Acid Plant Main Stack	Point	#400 Sulfuric Stack	20	H2SO4	7,855	8,760	3.74	lb/hr	7,855	8,760	hrs/yr	12.5		14.7	54.8		5
114.0	#400 Sulfuric Acid Plant Main Stack	Point	#400 Sulfuric Stack	28	NOx	7,855	8,760	7.98	lb/hr	7,855	8,760	hrs/yr	10.4	(b)	31.3	40.7	(d)	6
114.0	#400 Sulfuric Acid Plant Main Stack	Point	#400 Sulfuric Stack	34	SO2	7,855	8,760	292	lb/hr	7,855	8,760	hrs/yr	332.9		1,146	1,458		5
114.0	#400 Sulfuric Acid Plant Main Stack	Point	#400 Sulfuric Stack	30	PM	7,855	8,760	7.32	lb/hr	7,855	8,760	hrs/yr	9.5	(b)	28.7	37.4	(d)	7
114.0	#400 Sulfuric Acid Plant Main Stack	Point	#400 Sulfuric Stack	31	PM10	7,855	8,760	6.00	lb/hr	7,855	8,760	hrs/yr	7.8	(b)	23.6	30.6	(d)	4
*																		

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Emission factor from source tests on 5/06, 5/05, and 9/04. Lb/Hr and Ton/Yr Maximum emissions from Tier 1 permit No. T1-040313 limit - Sulfuric Acid plant No. 300 stack.

2 Emission factor from source tests on 5/06, 5/05, and 8/04. Ton/Yr Maximum emissions from Tier 1 permit No. T1-040313 limit - Sulfuric Acid plant No. 300 stack. Lb/Hr Maximum emissions from RACT limits set in the Compliance Agreement & Voluntary Order.

3 Emission factor from source tests on 5/06, 5/05, and 8/04.

4 Assumes PM10 = 82% of PM. Emission Factor = 0.82 x EF for PM. In accordance with RACT requirements, source testing is being conducted to establish a PM10 emission limit.

5 Emission factor from source tests on 11/06, 12/05, and 11/04. Lb/Hr and Ton/Yr Maximum emissions from Tier 1 permit No. T1-040313 limit - Sulfuric Acid plant No. 400 stack.

6 Emission factor and from source tests on 11/06, 2/06, and 12/05. Hourly maximum set at 130% of maximum average hourly emissions. New hourly and annual emission limits will be determined based on the methodology specified in the RACT Compliance Agreement & Voluntary Order.

7 Emission factor from source tests on 11/06, 2/06, and 12/05.

Emissions Inventory Group ID: 2.0
Emissions Inventory Group Name: Sulfuric Acid Plant #300 & #400 Fugitives
Tier 1 Permit Group ID: Subset of group 14 and 15

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)				Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual		Maximum		
*																		
103.0	#300 Sulfuric Rail Car Steaming	Fugitive	Car Lids	19	H2S	8,760	8,760	--	--	--	--	--	--	--		--		1
104.0	#300 Sulfuric Rail Car Dumping	Fugitive	Dump Pit	19	H2S	8,760	8,760	2.7	lb/hr	8,760	8,760	hrs/yr	2.7	12	(c)	12		2
104.0	#300 Sulfuric Rail Car Dumping	Fugitive	Dump Pit	34	SO2	8,760	8,760						--	--		--		3
116.0	#400 Sulfuric Rail Car Steaming	Fugitive	Car Lids	19	H2S	8,760	8,760	--	--	--	--	--	--	--		--		4
117.0	#400 Sulfuric Rail Car Dumping	Fugitive	Dump Pits	19	H2S	8,760	8,760	6.3	lb/hr	8,760	8,760	hrs/yr	6.3	27.5	(c)	27.5		5
117.0	#400 Sulfuric Rail Car Dumping	Fugitive	Dump Pits	34	SO2	8,760	8,760						--	--		--		6
1550.0	Day Storage Tank - 93%	Point	Outside	34	SO2	8,760	8,760	1.90	lb/hour	8,760	8,760	hours/yr	2.5 (b)	8.3	(c)	10.8	(d)	7
1551.0	Day Storage Tank - 98%	Point	Outside	34	SO2	8,760	8,760	1.90	lb/hour	8,760	8,760	hours/yr	2.5 (b)	8.3	(c)	10.8	(d)	7
1552.0	Day Storage Tank - 93%	Point	Outside	34	SO2	8,760	8,760	1.90	lb/hour	8,760	8,760	hours/yr	2.5 (b)	8.3	(c)	10.8	(d)	7
1553.0	Day Storage Tank - 98%	Point	Outside	34	SO2	8,760	8,760	--	--	--	--	--	--	--		--		8
*																		

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Source #104 includes emissions from this source.
2 Calculated using actual throughput and a concentration of 100 ppm (0.2 lbs/ton) H2S in sulfur - typical measurement at railcar lid opening (Assume 10% is emitted). 137 tons/hr sulfur unloaded.
3 Source #105 includes emissions from this source.
4 Source #117 includes emissions from this source.
5 Calculated using actual throughput and a concentration of 100 ppm (0.2 lbs/ton) H2S in sulfur - typical measurement at railcar lid opening (Assume 10% is emitted). 314 tons/hr sulfur unloaded.
6 Source #118 includes emissions from this source.
7 Emission factor determined from historical Simplot data.
8 Source #1552 includes Actual and Maximum emissions from this source.

Emissions Inventory Group ID: 3.0
Emissions Inventory Group Name: Phosphoric Acid Plant Stack
Tier 1 Permit Group ID: 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum	
*																
200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	5.74E-05	lb/hr	7,896	8,760	hrs/yr	1.05E-04	2.27E-04	4.59E-04	1
200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	0.3	lb/hr	7,896	8,760	hrs/yr	1.3	1.0	4.7	2
200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	1.85	lb/hr	7,896	8,760	hrs/yr	3.4	7.3	14.8	2
200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	1.5	lb/hr	7,896	8,760	hrs/yr	2.8	6.0	12.1	3
200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	3.5	lb/hr	7,896	8,760	hrs/yr	8.6	13.9	37.7	4
200.0	#2 Hot Pit (Hot Well for #11 EVAP)	Point	Belt Filter Scrb Stk	34	SO2	7,896	8,760	6.8	lb/hr	7,896	8,760	hrs/yr	8.9 (b)	26.9	35.0 (d)	5
202.0	Digester Hot Wells	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
202.0	Digester Hot Wells	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
202.0	Digester Hot Wells	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
202.0	Digester Hot Wells	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
202.0	Digester Hot Wells	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--		--	--		--	--	--	6
203.0	Vacuum Pumps	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
203.0	Vacuum Pumps	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
203.0	Vacuum Pumps	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
203.0	Vacuum Pumps	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
203.0	Vacuum Pumps	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--		--	--		--	--	--	6
203.1	Digester Flash Cooler Vacuum Pumps	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
203.1	Digester Flash Cooler Vacuum Pumps	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
203.1	Digester Flash Cooler Vacuum Pumps	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
203.1	Digester Flash Cooler Vacuum Pumps	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
203.1	Digester Flash Cooler Vacuum Pumps	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
203.2	Belt Filter Vacuum Pumps	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
203.2	Belt Filter Vacuum Pumps	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
203.2	Belt Filter Vacuum Pumps	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
203.2	Belt Filter Vacuum Pumps	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
203.2	Belt Filter Vacuum Pumps	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
204.0	Filtrate Cans	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
204.0	Filtrate Cans	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
204.0	Filtrate Cans	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
204.0	Filtrate Cans	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
204.0	Filtrate Cans	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--		--	--		--	--	--	6
209.0	Belt Filters	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
209.0	Belt Filters	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
209.0	Belt Filters	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
209.0	Belt Filters	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
209.0	Belt Filters	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--		--	--		--	--	--	6
212.0	Phos-Acid Reactor	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--		--	--		--	--	--	6
212.0	Phos-Acid Reactor	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--		--	--		--	--	--	6
212.0	Phos-Acid Reactor	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--		--	--		--	--	--	6
212.0	Phos-Acid Reactor	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--		--	--		--	--	--	6
212.0	Phos-Acid Reactor	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--		--	--		--	--	--	6

Emissions Inventory Group ID: 3.0
Emissions Inventory Group Name: Phosphoric Acid Plant Stack
Tier 1 Permit Group ID: 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [(a)]	Pollutant Name	Annual Operating Hours		Emission Factor	Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum		Actual	Maximum	Units		Actual [(c)]	Maximum	
212.0	Phos-Acid Reactor	Point	Belt Filter Scrb Stk	34	SO2	7,896	8,760	--	--	--		--	--	--	6
215.0	Evaporator Hot Wells	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--	--	--		--	--	--	6
215.0	Evaporator Hot Wells	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--	--	--		--	--	--	6
215.0	Evaporator Hot Wells	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--	--	--		--	--	--	6
215.0	Evaporator Hot Wells	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--	--	--		--	--	--	6
215.0	Evaporator Hot Wells	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--	--	--		--	--	--	6
226.0	Digester Flash Cooler Precondenser Cans	Point	Belt Filter Scrb Stk	9	Cadmium	7,896	8,760	--	--	--		--	--	--	6
226.0	Digester Flash Cooler Precondenser Cans	Point	Belt Filter Scrb Stk	17	Fluorides	7,896	8,760	--	--	--		--	--	--	6
226.0	Digester Flash Cooler Precondenser Cans	Point	Belt Filter Scrb Stk	30	PM	7,896	8,760	--	--	--		--	--	--	6
226.0	Digester Flash Cooler Precondenser Cans	Point	Belt Filter Scrb Stk	31	PM10	7,896	8,760	--	--	--		--	--	--	6
226.0	Digester Flash Cooler Precondenser Cans	Point	Belt Filter Scrb Stk	33	Reduced S	7,896	8,760	--	--	--		--	--	--	6
*															

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation) < (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0031% Cd in PM based on historical Simplot data; Emission Factor = 0.000031 x EF for PM. Maximum emissions = Tier I permit limit for PM x 0.0031%.

2 Emission factor from source tests on 3/06, 3/05, and 7/04. Lb/Hr and Ton/Yr Maximum emissions from Tier I permit No. T1-040313 - Wet Process Phosphoric Acid Plant No. 400 Stack.

3 Maximum emissions from Tier I permit No. T1-040313 - Wet Process Phosphoric Acid Plant No. 400 Stack. Engineering estimation: PM10 = 82% PM. Emission Factor = 0.82 x EF for PM.

4 Emission factor from source test on 7/04. Maximum emissions from Tier I permit No. T1-040313 - Wet Process Phosphoric Acid Plant No. 400 Stack.

5 Emission factor from source tests on 2/02 and 7/03.

6 Source #200 includes emissions from this source.

Emissions Inventory Group ID: 4.0
Emissions Inventory Group Name: Phosphoric Acid Plant Fugitives
Tier 1 Permit Group ID: Subset of group 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)				Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual		Maximum		
*																			
207.1	#9 Sump	Fug	Inside/Outside	17	Fluorides	8,760	8,760	1.13E-02	lb/day	365	365	days/yr	6.13E-04	(b)	2.06E-03	(c)	2.68E-03	(d)	1
207.2	#1 Sump	Fug	Inside/Outside	17	Fluorides	8,760	8,760	7.35E-04	lb/day	365	365	days/yr	3.98E-05	(b)	1.34E-04	(c)	1.74E-04	(d)	1
207.3	#2 Sump	Fug	Inside/Outside	17	Fluorides	8,760	8,760	7.35E-04	lb/day	365	365	days/yr	3.98E-05	(b)	1.34E-04	(c)	1.74E-04	(d)	1
207.4	#3 Sump	Fug	Inside/Outside	17	Fluorides	8,760	8,760	1.32E-03	lb/day	365	365	days/yr	7.16E-05	(b)	2.41E-04	(c)	3.14E-04	(d)	1
210.0	Belt Filters	Fug	Inside	17	Fluorides	7,896	8,760	3.20E-04	lb/ton	382,457	565,750	tons/yr	0.021	(b)	0.061	(c)	0.082	(d)	2
227.0	Pneumatic Transfer Vent	Pt	Outside Vent	30	PM	8,760	8,760	1.60E-02	lb/ton	1,825	3,650	tons/yr	0.103		0.015	(c)	0.029		3
227.0	Pneumatic Transfer Vent	Pt	Outside Vent	31	PM10	8,760	8,760	7.60E-03	lb/ton	1,825	3,650	tons/yr	0.103		0.007	(c)	0.014		3
230.0	Phosphoric Acid Plant Fugitives	Fug	Inside	9	Cadmium	7,896	8,760	--		7,896	8,760	hrs/yr	2.10E-05	(e)	4.53E-05	(f)	9.18E-05	(g)	4
230.0	Phosphoric Acid Plant Fugitives	Fug	Inside	30	PM	7,896	8,760	--		7,896	8,760	hrs/yr	0.68	(e)	1.46	(f)	2.96	(g)	4
230.0	Phosphoric Acid Plant Fugitives	Fug	Inside	31	PM10	7,896	8,760	--		7,896	8,760	hrs/yr	0.55	(e)	1.20	(f)	2.43	(g)	4
230.0	Phosphoric Acid Plant Fugitives	Fug	Inside	33	Reduced S	7,896	8,760	--		7,896	8,760	hrs/yr	0.86	(e)	1.39	(f)	3.77	(g)	5
230.0	Phosphoric Acid Plant Fugitives	Fug	Inside	48	SO2	7,896	8,760	--		7,896	8,760	hrs/yr	0.89	(e)	2.69	(f)	3.50	(g)	5
*																			

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

(e) Maximum Hourly Emissions (lb/hr) = (Source 200.0 Maximum Hourly Emissions [lb/hr] / (1 - Control Efficiency [%]/100)) x (1 - Capture Efficiency [%]/100)

Cadmium, PM, PM10 Control Efficenency (%) = 95
Reduced S, SO2 Control Efficiency (%) = 90
Capture Efficenency (%) = 99

(f) Actual Annual Emissions (ton/yr) = (Source 200.0 Actual Annual Emissions [ton/yr] / (1 - Control Efficiency [%]/100)) x (1 - Capture Efficiency [%]/100)

Cadmium, PM, PM10 Control Efficenency (%) = 95
Reduced S, SO2 Control Efficiency (%) = 90
Capture Efficenency (%) = 99

(g) Maximum Annual Emissions (ton/yr) = (Source 200.0 Maximum Annual Emissions [ton/yr] / (1 - Control Efficiency [%]/100)) x (1 - Capture Efficiency [%]/100)

Cadmium, PM, PM10 Control Efficenency (%) = 95
Reduced S, SO2 Control Efficiency (%) = 90
Capture Efficenency (%) = 99

References:

1 Emission factor of 1.6 lb/acre-day was used (site specific factor). #9 Sump is 28' x 11', #1 Sump is 5' x 4', #2 Sump is 5' x 4', and #3 Sump is 6' x 6'.

2 AP-42, 5th ed., Table 8.9-2 for uncontrolled, wet phosphoric acid production - belt filters (0.064 lb/ton); Emission Factor Adjustment factor = 0.005 (0.5% of the emissions escape from the Belt Filter Scrubber Stack as fugitives).

3 Emission factor calculated using AP-42 (5th Ed), Section 13.2.4 material handling drop equation (wind speed 10.3 mile/hr, moisture 1%). Lb/hr Maximum is worst hour operation using 0.02 gr/CF and 600 CFM (provided by vendor). Ton/Yr Maximum = EF x Maximum Annual Throughput. Actual CaCO3 Throughput = 5 ton/day, Maximum Throughput = 2 x Actual Throughput.

4 All emissions are based on source 200 emission estimates with the assumption that 99% of emissions generated are captured and controlled by 95%.

5 All emissions are based on source 200 emission estimates with the assumption that 99% of emissions generated are captured and controlled by 90%.

Emissions Inventory Group ID: 5.0
Emissions Inventory Group Name: Phosphoric Acid Tank Farm Scrubber
Tier 1 Permit Group ID: Subset of group 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions [b] (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
229.0	Tank Farm Scrubber	Pt	T.F. Scrubber	9	Cadmium	8,760	8,760	1.64E-05	lb/hr	8,760	8,760	hrs/yr	3.27E-05	7.17E-05	2.87E-04	1
229.0	Tank Farm Scrubber	Pt	T.F. Scrubber	17	Fluorides	8,760	8,760	0.45	lb/hr	8,760	8,760	hrs/yr	0.89	1.96	7.83	2
229.0	Tank Farm Scrubber	Pt	T.F. Scrubber	30	PM	8,760	8,760	0.53	lb/hr	8,760	8,760	hrs/yr	1.06	2.31	9.3	3
229.0	Tank Farm Scrubber	Pt	T.F. Scrubber	31	PM10	8,760	8,760	0.43	lb/hr	8,760	8,760	hrs/yr	0.87	1.90	7.6	4
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) x 2 THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) x 2

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) x 2

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr]) x 2

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0031% Cd in PM based on historical Simplot data; Emission Factor = 0.000031 x EF for PM. Maximum Hourly and Annual emissions = 2 x Actual emissions (to account for variability).

2 Emission factor from source tests on 1/95 and 5/95. Maximum Hourly and Annual emissions = 2 x Actual emissions (to account for variability).

3 Emission factor from source test on 5/95. Maximum Hourly and Annual emissions = 2 x Actual emissions (to account for variability).

4 Assumes 82% PM10 in PM. Emission Factor = 0.82 x EF for PM. Maximum Hourly and Annual emissions = 2 x Actual emissions (to account for variability).

Emissions Inventory Group ID: 6.0
Emissions Inventory Group Name: Tank Farm Area Fugitives
Tier 1 Permit Group ID: Subset of group 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)			Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [d]	Maximum		
*																		
223	West End Sump	Fug	Outside	17	Fluorides	7,896	8,760	5.88E-04	lb/day	329	365	days/yr	3.18E-05	(b)	9.67E-05	1.26E-04	(e)	1
228	#53 Tank Sump	Fug	Outside	17	Fluorides	7,896	8,760	1.76E-03	lb/day	329	365	days/yr	9.55E-05	(b)	2.90E-04	3.77E-04	(e)	1
1421	Gyp Thickner Overflow (E & W)	Fug	Outside	17	Fluorides	8,760	8,760	5.77E-03	lb/day	365	365	days/yr	4.81E-04	(c)	1.05E-03	4.21E-03	(f)	2
1700	Hot Pit Overflow (E & W Ponds)	Fug	Pond Surface	17	Fluorides	8,760	8,760	1.80	lb/day	365	365	days/yr	0.098	(b)	0.33	0.43	(e)	1
*																		

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN
Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])
ELSE IF (Actual Hours of Operation / Maximum Hours of Operation) ≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN
Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])
ELSE
Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])
WHERE
Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) x 2 THEN
Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) x 2
ELSE IF (Actual Hours of Operation / Maximum Hours of Operation) ≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN
Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) x 2
ELSE
Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr]) x 2
WHERE
Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(d) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)
(e) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))
(f) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton)) x 2

References:

1 Emission factor of 1.6 lb/acre-day was used (site specific factor). West End Sump is 4' x 4', #53 Tank Sump is 6' x 8', and Hot Pit Overflow is 49,021 square feet.
2 Emission factor of 1.6 lb/acre-day was used (site specific factor). Gyp Thickner Overflow is 157 square feet. Maximum Hourly and Annual emissions = 2 x Actual emissions (to account for variability).

Emissions Inventory Group ID: 8.0
Emissions Inventory Group Name: Ammonia Storage Fugitives
Tier 1 Permit Group ID: Subset of group 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [b]	Maximum [c]	
*																
1441	Low Press. NH3 Storage	Fug	Outside	26	NH3	8,760	8,760	2.07	lb/hr	8,760	8,760	hrs/yr	2.07	9.1	9.1	1
1447	Ammonia Bullet Stor. (E & W)	Fug	Outside	26	NH3	8,760	8,760	0.39	lb/hr	8,760	8,760	hrs/yr	0.39	1.7	1.7	2
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)
(c) Maximum Annual Emissions (ton/yr) = (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

References:

1 Emission factor obtained from "Estimating Releases and Waste-Treatment Efficiencies for the Toxic Chemical Release Inventory Form, Section 313, Title III of Superfund Amendments and Reauthorization Act of 1986, Page D-2, Table D-1, Average Fugitive Emission Factors for the Synthetic Organic Chemicals Manufacturing Industry (SOCMI)". This source includes 260 flanges, 68 liquid valves, 42 gas valves, 21 relief valves, and 16 pump seals.

2 Emission factor obtained from "Estimating Releases and Waste-Treatment Efficiencies for the Toxic Chemical Release Inventory Form, Section 313, Title III of Superfund Amendments and Reauthorization Act of 1986, Page D-2, Table D-1, Average Fugitive Emission Factors for the Synthetic Organic Chemicals Manufacturing Industry (SOCMI)". This source includes 55 flanges, 59 liquid valves, 22 gas valves, 0 relief valves, and 3 pump seals).

Emissions Inventory Group ID: 12.0
Emissions Inventory Group Name: Ammonia Storage Flare
Tier 1 Permit Group ID: Subset of group 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [(a)]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual	Maximum	
*																
378	Ammonia Flare	Pt.	Ammonia Flare Stack	12	CO	240	480	84	lb/MMscf	1.63	2.81	MMscf/y	0.40	6.6E-02	1.1E-01	1
378	Ammonia Flare	Pt.	Ammonia Flare Stack	28	NOx	240	480	135	lb/hr	240	480	hr/yr	135	16.2	32.4	2
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

References:

1 Emission factor from AP-42, Table 1.4-1, (July, 1998). Assumes 5 MMBtu/hr while operating, 0.05 MMBtu/hr when not operating (pilot light), 1040 Btu/scf.
2 Emission factor assumes 1% of 5,000 lb/hr NH3 converted to NOx; adjusted for molecular weight.

Emissions Inventory Group ID: 13.0
Emissions Inventory Group Name: Granulation #1 Dryer Stack
Tier 1 Permit Group ID: 5.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)			Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum		
*																		
400	Dryer	Pt	Dryer Stack	1	2-Methylnaphthalene	6,605	8,760	2.40E-05	lb/MMscf	76	168	MMscf/yr	4.62E-07	(b)	9.16E-07	1.52E-06	(d)	1
400	Dryer	Pt	Dryer Stack	5	Arsenic	6,605	8,760	2.00E-04	lb/MMscf	76	168	MMscf/yr	3.85E-06	(b)	7.64E-06	1.27E-05	(d)	2
400	Dryer	Pt	Dryer Stack	6	Benzene	6,605	8,760	2.10E-03	lb/MMscf	76	168	MMscf/yr	4.04E-05	(b)	8.02E-05	1.33E-04	(d)	1
400	Dryer	Pt	Dryer Stack	9	Cadmium	6,605	8,760	1.178E-05	lb/hr	6,605	8,760	hrs/yr	1.53E-05	(b)	3.89E-05	5.16E-05	(d)	3
400	Dryer	Pt	Dryer Stack	10	Chromium	6,605	8,760	1.40E-03	lb/MMscf	76	168	MMscf/yr	2.69E-05	(b)	5.35E-05	8.89E-05	(d)	2
400	Dryer	Pt	Dryer Stack	12	CO	6,605	8,760	84	lb/MMscf	76	168	MMscf/yr	0.37		3.2	1.6		4
400	Dryer	Pt	Dryer Stack	13	Cobalt	6,605	8,760	8.40E-05	lb/MMscf	76	168	MMscf/yr	1.62E-06	(b)	3.21E-06	5.33E-06	(d)	2
400	Dryer	Pt	Dryer Stack	14	Dichlorobenzene	6,605	8,760	1.20E-03	lb/MMscf	76	168	MMscf/yr	2.31E-05	(b)	4.58E-05	7.62E-05	(d)	1
400	Dryer	Pt	Dryer Stack	15	Fluoranthene	6,605	8,760	3.00E-06	lb/MMscf	76	168	MMscf/yr	5.77E-08	(b)	1.15E-07	1.91E-07	(d)	1
400	Dryer	Pt	Dryer Stack	16	Fluorene	6,605	8,760	2.80E-06	lb/MMscf	76	168	MMscf/yr	5.38E-08	(b)	1.07E-07	1.78E-07	(d)	1
400	Dryer	Pt	Dryer Stack	17	Fluorides	6,605	8,760	0.05	lb/hr	6,605	8,760	hrs/yr	7.8		0.17	34.2		5
400	Dryer	Pt	Dryer Stack	18	Formaldehyde	6,605	8,760	0.075	lb/MMscf	76	168	MMscf/yr	1.44E-03	(b)	2.86E-03	4.76E-03	(d)	1
400	Dryer	Pt	Dryer Stack	21	Hexane	6,605	8,760	1.8	lb/MMscf	76	168	MMscf/yr	3.46E-02	(b)	6.87E-02	1.14E-01	(d)	1
400	Dryer	Pt	Dryer Stack	22	Lead	6,605	8,760	5.00E-04	lb/MMscf	76	168	MMscf/yr	9.62E-06	(b)	1.91E-05	3.18E-05	(d)	6
400	Dryer	Pt	Dryer Stack	23	Manganese	6,605	8,760	3.80E-04	lb/MMscf	76	168	MMscf/yr	7.31E-06	(b)	1.45E-05	2.41E-05	(d)	2
400	Dryer	Pt	Dryer Stack	24	Mercury	6,605	8,760	2.60E-04	lb/MMscf	76	168	MMscf/yr	5.00E-06	(b)	9.93E-06	1.65E-05	(d)	2
400	Dryer	Pt	Dryer Stack	25	Naphthalene	6,605	8,760	6.10E-04	lb/MMscf	76	168	MMscf/yr	1.17E-05	(b)	2.33E-05	3.87E-05	(d)	1
400	Dryer	Pt	Dryer Stack	27	Nickel	6,605	8,760	1.37E-04	lb/hr	6,605	8,760	hrs/yr	1.78E-04	(b)	4.52E-04	6.00E-04	(d)	7
400	Dryer	Pt	Dryer Stack	28	NOx	6,605	8,760	100	lb/MMscf	76	168	MMscf/yr	1.44		3.82	6.3		4
400	Dryer	Pt	Dryer Stack	29	Phenanthrene	6,605	8,760	1.70E-05	lb/MMscf	76	168	MMscf/yr	3.27E-07	(b)	6.49E-07	1.08E-06	(d)	1
400	Dryer	Pt	Dryer Stack	30	PM	6,605	8,760	1.5	lb/hr	6,605	8,760	hrs/yr	23.8		4.9	104.3		5
400	Dryer	Pt	Dryer Stack	31	PM10	6,605	8,760	1.2	lb/hr	6,605	8,760	hrs/yr	19.5		4.0	85.5		8
400	Dryer	Pt	Dryer Stack	32	Pyrene	6,605	8,760	5.00E-06	lb/MMscf	76	168	MMscf/yr	9.62E-08	(b)	1.91E-07	3.18E-07	(d)	1
400	Dryer	Pt	Dryer Stack	34	SO2	6,605	8,760	0.30	lb/MMscf	76	168	MMscf/yr	4.00E-03		1.15E-02	1.90E-02		9
400	Dryer	Pt	Dryer Stack	35	Toluene	6,605	8,760	3.40E-03	lb/MMscf	76	168	MMscf/yr	6.54E-05	(b)	1.30E-04	2.16E-04	(d)	1
400	Dryer	Pt	Dryer Stack	36	VOC	6,605	8,760	5.50	lb/MMscf	76	168	MMscf/yr	1.06E-01	(b)	2.10E-01	3.49E-01	(d)	6
404	Dryer Scrubber Tank	Pt	Dryer Stack	9	Cadmium	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	12	CO	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	17	Fluorides	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	27	Nickel	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	28	NOx	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	30	PM	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	31	PM10	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	34	SO2	6,605	8,760	--		--	--		--		--	--		10
404	Dryer Scrubber Tank	Pt	Dryer Stack	36	VOC	6,605	8,760	--		--	--		--		--	--		10
*																		

Emissions Inventory Group ID: 13.0
Emissions Inventory Group Name: Granulation #1 Dryer Stack
Tier 1 Permit Group ID: 5.0

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation) ≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 AP-42, 5th ed., Table 1.4-3 (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 Btu/scf.

2 AP-42, 5th ed., Table 1.4-4 (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 Btu/scf.

3 Assumes 0.0008% Cd in PM based on historical Simplot data; Emission Factor = 0.000008 x EF for PM.

4 AP-42, 5th ed., Table 1.4-1 for small uncontrolled natural gas combustion device (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions limit from Tier I permit No. T1-040313 for all Granulation #1 Stacks.

5 Emission factors from source tests on 7/06, 3/05, and 7/04. Maximum emissions limit from Tier I permit No. T1-040313 for all Granulation #1 Stacks.

6 AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 Btu/scf.

7 Assumes 0.0093% Ni in PM based on historical Simplot data. Emission Factor = 0.000093 x EF for PM.

8 Maximum emission limit from Tier I permit No. T1-040313 for all Granulation #1 Stacks. Assumes 82% PM10 in PM. Emission Factor = 0.82 x EF for PM.

9 AP-42, 5th ed., Table 1.4-2 for natural gas combusion devices (July 1998). Scrubber efficiency of 50% based on engineering judgement. Emission Factor Adjustment = 0.5. Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Lb/Hr and Ton/Yr Maximum emissions limit from Tier I permit No. T1-040313 for all Granulation #1 Stacks.

10 Source #400 Actual and Maximum emissions include this source.

Emissions Inventory Group ID: 14.0
Emissions Inventory Group Name: Granulation #1 Reactor/Granulator Stack
Tier 1 Permit Group ID: 5.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
401	Granulator	Pt	Reac/Gran Stack	9	Cadmium	6,605	8,760	1.28E-05	lb/hr	6,605	8,760	hrs/yr	1.67E-05	4.23E-05	5.61E-05	1
401	Granulator	Pt	Reac/Gran Stack	17	Fluorides	6,605	8,760	0.12	lb/hr	6,605	8,760	hrs/yr	--	0.39	--	2
401	Granulator	Pt	Reac/Gran Stack	26	NH3	6,605	8,760	0.14	lb/ton	1,236,596	2,042,975	tons/yr	42.4	86.56	140.18	3
401	Granulator	Pt	Reac/Gran Stack	27	Nickel	6,605	8,760	2.19E-05	lb/hr	6,605	8,760	hrs/yr	2.85E-05	7.23E-05	9.59E-05	4
401	Granulator	Pt	Reac/Gran Stack	30	PM	6,605	8,760	0.53	lb/hr	6,605	8,760	hrs/yr	--	1.76	--	2
401	Granulator	Pt	Reac/Gran Stack	31	PM10	6,605	8,760	0.44	lb/hr	6,605	8,760	hrs/yr	--	1.45	--	5
403	Reactor	Pt	Reac/Gran Stack	9	Cadmium	6,605	8,760	--		--	--		--	--	--	6
403	Reactor	Pt	Reac/Gran Stack	17	Fluorides	6,605	8,760	--		--	--		--	--	--	7
403	Reactor	Pt	Reac/Gran Stack	26	NH3	6,605	8,760	--		--	--		--	--	--	6
403	Reactor	Pt	Reac/Gran Stack	27	Nickel	6,605	8,760	--		--	--		--	--	--	6
403	Reactor	Pt	Reac/Gran Stack	30	PM	6,605	8,760	--		--	--		--	--	--	7
403	Reactor	Pt	Reac/Gran Stack	31	PM10	6,605	8,760	--		--	--		--	--	--	7
405	Reac/Gran Scrubber Tank	Pt	Reac/Gran Stack	9	Cadmium	6,605	8,760	--		--	--		--	--	--	6
405	Reac/Gran Scrubber Tank	Pt	Reac/Gran Stack	17	Fluorides	6,605	8,760	--		--	--		--	--	--	7
405	Reac/Gran Scrubber Tank	Pt	Reac/Gran Stack	27	Nickel	6,605	8,760	--		--	--		--	--	--	6
405	Reac/Gran Scrubber Tank	Pt	Reac/Gran Stack	30	PM	6,605	8,760	--		--	--		--	--	--	7
405	Reac/Gran Scrubber Tank	Pt	Reac/Gran Stack	31	PM10	6,605	8,760	--		--	--		--	--	--	7
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0024% Cd in PM based on historical Simplot data. Emission Factor = 0.000024 x EF for PM.
2 Emission factors from source tests on 7/06, 3/05, 7/04. Source #400 Maximum emissions include this source.
3 AP-42 Table 8.5.3-1, (July, 1993).
4 Assumes 0.0041% Ni in PM based on historical Simplot data. Emission Factor = 0.000041 x EF for PM.
5 Source #400 Maximum emissions include this source. Assumes PM10 = 82% PM. Emission Factor = 0.82 x EF for PM.
6 Source #401 Actual and Maximum emissions include this source.
7 Source #400 Maximum emissions include this source. Source #401 Actual emissions include this source.

Emissions Inventory Group ID: 15.0
Emissions Inventory Group Name: Granulation #1 Baghouse Stack
Tier 1 Permit Group ID: 5.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
406	Cooler	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	5.70E-05	lb/hr	6,605	8,760	hrs/yr	7.41E-05	1.88E-04	2.50E-04	1
406	Cooler	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	0.01	lb/hr	6,605	8,760	hrs/yr	--	0.03	--	2
406	Cooler	Pt	Baghouse Stack	30	PM	6,605	8,760	0.26	lb/hr	6,605	8,760	hrs/yr	--	0.86	--	2
406	Cooler	Pt	Baghouse Stack	31	PM10	6,605	8,760	0.21	lb/hr	6,605	8,760	hrs/yr	--	0.70	--	3
407.1	Polishing Screen	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	4
407.1	Polishing Screen	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	5
407.1	Polishing Screen	Pt	Baghouse Stack	30	PM	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	5
407.1	Polishing Screen	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	6
408.1	Cage Mills	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		309,148	510,950	tons/yr	--	--	--	4
408.1	Cage Mills	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		309,148	510,950	tons/yr	--	--	--	5
408.1	Cage Mills	Pt	Baghouse Stack	30	PM	6,605	8,760	--		309,148	510,950	tons/yr	--	--	--	5
408.1	Cage Mills	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		309,148	510,950	tons/yr	--	--	--	6
409.1	Conveyor to Product Elevator	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	4
409.1	Conveyor to Product Elevator	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	5
409.1	Conveyor to Product Elevator	Pt	Baghouse Stack	30	PM	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	5
409.1	Conveyor to Product Elevator	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		1,236,596	2,042,975	tons/yr	--	--	--	6
411.1	Fines Drag	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		10,467	13,881	tons/yr	--	--	--	4
411.1	Fines Drag	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		10,467	13,881	tons/yr	--	--	--	5
411.1	Fines Drag	Pt	Baghouse Stack	30	PM	6,605	8,760	--		10,467	13,881	tons/yr	--	--	--	5
411.1	Fines Drag	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		10,467	13,881	tons/yr	--	--	--	6
412.1	Elevator to Granulator	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		1,040,405	1,718,750	tons/yr	--	--	--	4
412.1	Elevator to Granulator	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		1,040,405	1,718,750	tons/yr	--	--	--	5
412.1	Elevator to Granulator	Pt	Baghouse Stack	30	PM	6,605	8,760	--		1,040,405	1,718,750	tons/yr	--	--	--	5
412.1	Elevator to Granulator	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		1,040,405	1,718,750	tons/yr	--	--	--	6
413.1	Elevator to Screens	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		642,078	1,060,950	tons/yr	--	--	--	4
413.1	Elevator to Screens	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		642,078	1,060,950	tons/yr	--	--	--	5
413.1	Elevator to Screens	Pt	Baghouse Stack	30	PM	6,605	8,760	--		642,078	1,060,950	tons/yr	--	--	--	5
413.1	Elevator to Screens	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		642,078	1,060,950	tons/yr	--	--	--	6
414.1	Product Elevator	Pt	Baghouse Stack	9	Cadmium	6,605	8,760	--		208,081	474,500	tons/yr	--	--	--	4
414.1	Product Elevator	Pt	Baghouse Stack	17	Fluorides	6,605	8,760	--		208,081	474,500	tons/yr	--	--	--	5
414.1	Product Elevator	Pt	Baghouse Stack	30	PM	6,605	8,760	--		208,081	474,500	tons/yr	--	--	--	5
414.1	Product Elevator	Pt	Baghouse Stack	31	PM10	6,605	8,760	--		208,081	474,500	tons/yr	--	--	--	6
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Emissions Inventory Group ID: 15.0
Emissions Inventory Group Name: Granulation #1 Baghouse Stack
Tier 1 Permit Group ID: 5.0

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0220% Cd in PM based on historical Simplot data. Emission Factor = 0.000220 x EF for PM.
2 Emission factors from source tests on 7/06, 3/05, and 7/04. Source #400 Maximum emissions include this source.
3 Source #400 Tier II permit limits include this source. Assumes PM10 = 82% PM. Emission Factor = 0.82 x EF for PM.
4 Source #406 Actual and Maximum emissions include this source.
5 Source #400 Maximum emissions include this source. Source #406 source test data include this source.
6 Source #400 Maximum emissions include this source. Source #406 Actual emissions include this source.

Emissions Inventory Group ID: 16.0
Emissions Inventory Group Name: Granulation #1 Process Fugitives
Tier 1 Permit Group ID: Subset of group 5

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
410	Reject Hopper	Fug	Outside	9	Cadmium	6,605	8,760	2.20E-09	lb/ton	10,467	13,881	tons/yr	4.53E-09	1.15E-08	1.53E-08	1
410	Reject Hopper	Fug	Outside	17	Fluorides	6,605	8,760	1.84E-07	lb/ton	10,467	13,881	tons/yr	3.79E-07	9.63E-07	1.28E-06	2
410	Reject Hopper	Fug	Outside	30	PM	6,605	8,760	1.00E-05	lb/ton	10,467	13,881	tons/yr	2.06E-05	5.23E-05	6.94E-05	3
410	Reject Hopper	Fug	Outside	31	PM10	6,605	8,760	1.50E-06	lb/ton	10,467	13,881	tons/yr	3.09E-06	7.85E-06	1.04E-05	4
416	Fines Drag Conveyer	Fug	Inside	9	Cadmium	6,605	8,760	4.40E-07	lb/ton	1,041,592	1,720,950	tons/yr	1.12E-04	2.29E-04	3.71E-04	1
416	Fines Drag Conveyer	Fug	Inside	17	Fluorides	6,605	8,760	3.68E-05	lb/ton	1,041,592	1,720,950	tons/yr	9.40E-03	1.92E-02	3.10E-02	2
416	Fines Drag Conveyer	Fug	Inside	30	PM	6,605	8,760	2.00E-03	lb/ton	1,041,592	1,720,950	tons/yr	5.11E-01	1.04E+00	1.69E+00	5
416	Fines Drag Conveyer	Fug	Inside	31	PM10	6,605	8,760	3.00E-04	lb/ton	1,041,592	1,720,950	tons/yr	7.66E-02	1.56E-01	2.53E-01	4
418.1	Screens	Fug	Inside	9	Cadmium	6,605	8,760	4.40E-07	lb/ton	618,298	1,021,350	tons/yr	6.67E-05	1.36E-04	2.20E-04	1
418.1	Screens	Fug	Inside	17	Fluorides	6,605	8,760	3.68E-05	lb/ton	618,298	1,021,350	tons/yr	5.58E-03	1.14E-02	1.84E-02	2
418.1	Screens	Fug	Inside	30	PM	6,605	8,760	2.00E-03	lb/ton	618,298	1,021,350	tons/yr	3.03E-01	6.18E-01	1.00E+00	5
418.1	Screens	Fug	Inside	31	PM10	6,605	8,760	3.00E-04	lb/ton	618,298	1,021,350	tons/yr	4.55E-02	9.27E-02	1.50E-01	4
418.2	Polishing Screen	Fug	Inside	9	Cadmium	6,605	8,760	4.40E-07	lb/ton	219,971	363,275	tons/yr	2.37E-05	4.84E-05	7.83E-05	1
418.2	Polishing Screen	Fug	Inside	17	Fluorides	6,605	8,760	3.68E-05	lb/ton	219,971	363,275	tons/yr	1.98E-03	4.05E-03	6.55E-03	2
418.2	Polishing Screen	Fug	Inside	30	PM	6,605	8,760	2.00E-03	lb/ton	219,971	363,275	tons/yr	1.08E-01	2.20E-01	3.56E-01	5
418.2	Polishing Screen	Fug	Inside	31	PM10	6,605	8,760	3.00E-04	lb/ton	219,971	363,275	tons/yr	1.62E-02	3.30E-02	5.34E-02	4
418.3	Loader to Reject Hopper	Fug	Outside	9	Cadmium	6,605	8,760	4.40E-06	lb/ton	10,404	13,799	tons/yr	9.01E-06	2.29E-05	3.04E-05	1
418.3	Loader to Reject Hopper	Fug	Outside	17	Fluorides	6,605	8,760	3.68E-04	lb/ton	10,404	13,799	tons/yr	7.54E-04	1.91E-03	2.54E-03	8
418.3	Loader to Reject Hopper	Fug	Outside	30	PM	6,605	8,760	2.00E-02	lb/ton	10,404	13,799	tons/yr	4.10E-02	1.04E-01	1.38E-01	6
418.3	Loader to Reject Hopper	Fug	Outside	31	PM10	6,605	8,760	3.00E-03	lb/ton	10,404	13,799	tons/yr	6.14E-03	1.56E-02	2.07E-02	4
418.4	Reject Hopper to Conveyor	Fug	Outside	9	Cadmium	6,605	8,760	4.40E-06	lb/ton	10,404	13,799	tons/yr	9.01E-06	2.29E-05	3.04E-05	1
418.4	Reject Hopper to Conveyor	Fug	Outside	17	Fluorides	6,605	8,760	3.68E-04	lb/ton	10,404	13,799	tons/yr	7.54E-04	1.91E-03	2.54E-03	2
418.4	Reject Hopper to Conveyor	Fug	Outside	30	PM	6,605	8,760	2.00E-02	lb/ton	10,404	13,799	tons/yr	4.10E-02	1.04E-01	1.38E-01	6
418.4	Reject Hopper to Conveyor	Fug	Outside	31	PM10	6,605	8,760	3.00E-03	lb/ton	10,404	13,799	tons/yr	6.14E-03	1.56E-02	2.07E-02	4
418.5	Conveyor to Fines Drag	Fug	Inside/Outside	9	Cadmium	6,605	8,760	2.20E-06	lb/ton	10,404	13,799	tons/yr	4.51E-06	1.14E-05	1.52E-05	1
418.5	Conveyor to Fines Drag	Fug	Inside/Outside	17	Fluorides	6,605	8,760	1.84E-04	lb/ton	10,404	13,799	tons/yr	3.77E-04	9.57E-04	1.27E-03	2
418.5	Conveyor to Fines Drag	Fug	Inside/Outside	30	PM	6,605	8,760	1.00E-02	lb/ton	10,404	13,799	tons/yr	2.05E-02	5.20E-02	6.90E-02	7
418.5	Conveyor to Fines Drag	Fug	Inside/Outside	31	PM10	6,605	8,760	1.50E-03	lb/ton	10,404	13,799	tons/yr	3.07E-03	7.80E-03	1.03E-02	4
*																

Emissions Inventory Group ID: 16.0
Emissions Inventory Group Name: Granulation #1 Process Fugitives
Tier 1 Permit Group ID: Subset of group 5

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0220% Cd in PM based on historical Simplot data. Emission Factor = 0.00022 x EF for PM.
2 Assumes Fluorides = 1.84% PM based on historical Simplot data. Emission Factor = 0.0184 x EF for PM.
3 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90% for particulate emissions. Assumes 0.5% escapes the stack as fugitives. Emission Factor Adjustment = 0.0005.
4 PM10 = 15% PM based on historical Simplot data. Emission Factor = 0.15 x EF for PM.
5 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90% for particulate emissions. Emission Factor Adjustment = 0.1.
6 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993).
7 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 50% for particulate emissions. Emission Factor Adjusment = 0.5.
8 Assumes Fluorides = 1.84% PM based on historical Simplot data. Emission Factor = 0.0184 x EF for PM. Eng. estimation: Max yearly thruput = (1.2 x act days/yr) x (max daily thruput).

Emissions Inventory Group ID: 17.0
Emissions Inventory Group Name: Granulation #1 Storage and Loadout Fugitives
Tier 1 Permit Group ID: Subset of group 10

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)			Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum		
*																		
419	Product Dump From Overhead	Fug	Inside	9	Cadmium	6,605	8,760	4.40E-07	lb/ton	208,081	474,500	tons/yr	2.38E-05	(b)	4.58E-05	7.87E-05	(d)	1
419	Product Dump From Overhead	Fug	Inside	17	Fluorides	6,605	8,760	2.72E-05	lb/ton	208,081	474,500	tons/yr	0.07		2.83E-03	0.308		2
419	Product Dump From Overhead	Fug	Inside	30	PM	6,605	8,760	2.00E-03	lb/ton	208,081	474,500	tons/yr	7.03		2.08E-01	30.78		3
419	Product Dump From Overhead	Fug	Inside	31	PM10	6,605	8,760	3.00E-04	lb/ton	208,081	474,500	tons/yr	2.54		3.12E-02	11.12		4
420	Front End Loader Operation	Fug	Inside	9	Cadmium	1,532	8,760	4.40E-07	lb/ton	229,816	474,500	tons/yr	1.77E-04	(b)	5.06E-05	2.89E-04	(d)	1
420	Front End Loader Operation	Fug	Inside	17	Fluorides	1,532	8,760	2.72E-05	lb/ton	229,816	474,500	tons/yr	--		3.13E-03	--		5
420	Front End Loader Operation	Fug	Inside	30	PM	1,532	8,760	2.00E-03	lb/ton	229,816	474,500	tons/yr	--		2.30E-01	--		6
420	Front End Loader Operation	Fug	Inside	31	PM10	1,532	8,760	3.00E-04	lb/ton	229,816	474,500	tons/yr	--		3.45E-02	--		7
421	Underground Conveyer	Fug	Loading Vents	9	Cadmium	1,532	8,760	4.40E-07	lb/ton	229,816	474,500	tons/yr	1.77E-04	(b)	5.06E-05	2.89E-04	(d)	1
421	Underground Conveyer	Fug	Loading Vents	17	Fluorides	1,532	8,760	2.72E-05	lb/ton	229,816	474,500	tons/yr	--		3.13E-03	--		5
421	Underground Conveyer	Fug	Loading Vents	30	PM	1,532	8,760	2.00E-03	lb/ton	229,816	474,500	tons/yr	--		2.30E-01	--		6
421	Underground Conveyer	Fug	Loading Vents	31	PM10	1,532	8,760	3.00E-04	lb/ton	229,816	474,500	tons/yr	--		3.45E-02	--		7
422	Elevator	Fug	Inside	9	Cadmium	1,532	8,760	4.40E-07	lb/ton	229,816	474,500	tons/yr	1.77E-04	(b)	5.06E-05	2.89E-04	(d)	1
422	Elevator	Fug	Inside	17	Fluorides	1,532	8,760	2.72E-05	lb/ton	229,816	474,500	tons/yr	--		3.13E-03	--		5
422	Elevator	Fug	Inside	30	PM	1,532	8,760	2.00E-03	lb/ton	229,816	474,500	tons/yr	--		2.30E-01	--		6
422	Elevator	Fug	Inside	31	PM10	1,532	8,760	3.00E-04	lb/ton	229,816	474,500	tons/yr	--		3.45E-02	--		7
423	Crossover Belt	Fug	Outside/Covered	9	Cadmium	1,532	8,760	2.20E-06	lb/ton	229,816	474,500	tons/yr	8.86E-04	(b)	2.53E-04	1.45E-03	(d)	1
423	Crossover Belt	Fug	Outside/Covered	17	Fluorides	1,532	8,760	1.36E-04	lb/ton	229,816	474,500	tons/yr	--		1.56E-02	--		5
423	Crossover Belt	Fug	Outside/Covered	30	PM	1,532	8,760	1.00E-02	lb/ton	229,816	474,500	tons/yr	--		1.15E+00	--		6
423	Crossover Belt	Fug	Outside/Covered	31	PM10	1,532	8,760	1.50E-03	lb/ton	229,816	474,500	tons/yr	--		1.72E-01	--		7
423.1	Screens for Crossover Belt	Fug	Inside	9	Cadmium	1,532	8,760	4.40E-07	lb/ton	229,816	474,500	tons/yr	1.77E-04	(b)	5.06E-05	2.89E-04	(d)	1
423.1	Screens for Crossover Belt	Fug	Inside	17	Fluorides	1,532	8,760	2.72E-05	lb/ton	229,816	474,500	tons/yr	--		3.13E-03	--		5
423.1	Screens for Crossover Belt	Fug	Inside	30	PM	1,532	8,760	2.00E-03	lb/ton	229,816	474,500	tons/yr	--		2.30E-01	--		6
423.1	Screens for Crossover Belt	Fug	Inside	31	PM10	1,532	8,760	3.00E-04	lb/ton	229,816	474,500	tons/yr	--		3.45E-02	--		7
424	Bulking Loadout	Fug	Outside/Covered	9	Cadmium	1,532	8,760	2.20E-06	lb/ton	229,816	474,500	tons/yr	8.86E-04	(b)	2.53E-04	1.45E-03	(d)	1
424	Bulking Loadout	Fug	Outside/Covered	17	Fluorides	1,532	8,760	1.36E-04	lb/ton	229,816	474,500	tons/yr	--		1.56E-02	--		5
424	Bulking Loadout	Fug	Outside/Covered	30	PM	1,532	8,760	1.00E-02	lb/ton	229,816	474,500	tons/yr	--		1.15E+00	--		8
424	Bulking Loadout	Fug	Outside/Covered	31	PM10	1,532	8,760	1.50E-03	lb/ton	229,816	474,500	tons/yr	--		1.72E-01	--		7
*																		

Emissions Inventory Group ID: 17.0
Emissions Inventory Group Name: Granulation #1 Storage and Loadout Fugitives
Tier 1 Permit Group ID: Subset of group 10

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0220% Cd in PM based on historical Simplot data. Emission Factor = 0.00022 x EF for PM.

2 Assumes Fluorides = 1.36% PM (weighted average estimated by Westar). Emission Factor = 0.0136 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

3 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90%. Emission Factor Adjustment = 0.1. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

4 Assumes PM10 = 15% PM based on Simplot data. Emission Factor = 0.15 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

5 Assumes Fluorides = 1.36% PM (weighted average estimated by Westar). Emission Factor = 0.0136 x EF for PM. Source #419 Maximum emissions include this source.

6 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90%. Emission Factor Adjustment = 0.1. Source #419 Maximum emissions include this source.

7 Assumes PM10 = 15% PM based on Simplot data. Emission Factor = 0.15 x EF for PM. Source #419 Maximum emissions include this source.

8 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 50%. Emission Factor Adjustment = 0.5. Source #419 Maximum emissions include this source.

Emissions Inventory Group ID: 18.0
Emissions Inventory Group Name: Granulation #2 Tailgas Scrubber Stack
Tier 1 Permit Group ID: 6.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
450	Reactor	Pt	T.G. Scrubber	9	Cadmium	5,822	8,760	3.39E-05	lb/hr	5,822	8,760	hrs/yr	4.41E-05	(b)	9.87E-05	1.49E-04 (d)	1
450	Reactor	Pt	T.G. Scrubber	17	Fluorides	5,822	8,760	4.40E-02	lb/hr	5,822	8,760	hrs/yr	6.8		0.13	29.8	2
450	Reactor	Pt	T.G. Scrubber	26	NH3	5,822	8,760	1.40E-01	lb/ton	303,230	500,000	ton/yr	10.4	(b)	21.2	31.9 (d)	3
450	Reactor	Pt	T.G. Scrubber	27	Nickel	5,822	8,760	3.94E-04	lb/hr	5,822	8,760	hrs/yr	5.13E-04	(b)	1.15E-03	1.73E-03 (d)	4
450	Reactor	Pt	T.G. Scrubber	30	PM	5,822	8,760	4.24	lb/hr	5,822	8,760	hrs/yr	22.0		12.3	96.5	2
450	Reactor	Pt	T.G. Scrubber	31	PM10	5,822	8,760	3.48	lb/hr	5,822	8,760	hrs/yr	18.1		10.1	79.1	5
451	Granulator	Pt	T.G. Scrubber	9	Cadmium	5,822	8,760	--		--	--		--		--	--	6
451	Granulator	Pt	T.G. Scrubber	17	Fluorides	5,822	8,760	--		--	--		--		--	--	6
451	Granulator	Pt	T.G. Scrubber	26	NH3	5,822	8,760	--		--	--		--		--	--	6
451	Granulator	Pt	T.G. Scrubber	27	Nickel	5,822	8,760	--		--	--		--		--	--	6
451	Granulator	Pt	T.G. Scrubber	30	PM	5,822	8,760	--		--	--		--		--	--	6
451	Granulator	Pt	T.G. Scrubber	31	PM10	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	1	2-Methylnaphthalene	5,822	8,760	2.40E-05	lb/MMscf	79	168	MMscf/yr	4.62E-07	(b)	9.42E-07	1.42E-06 (d)	7
453	Dryer	Pt	T.G. Scrubber	5	Arsenic	5,822	8,760	2.00E-04	lb/MMscf	79	168	MMscf/yr	3.85E-06	(b)	7.85E-06	1.18E-05 (d)	8
453	Dryer	Pt	T.G. Scrubber	6	Benzene	5,822	8,760	2.10E-03	lb/MMscf	79	168	MMscf/yr	4.04E-05	(b)	8.24E-05	1.24E-04 (d)	7
453	Dryer	Pt	T.G. Scrubber	9	Cadmium	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	10	Chromium	5,822	8,760	1.40E-03	lb/MMscf	79	168	MMscf/yr	2.69E-05	(b)	5.50E-05	8.27E-05 (d)	8
453	Dryer	Pt	T.G. Scrubber	12	CO	5,822	8,760	84.0	lb/MMscf	79	168	MMscf/yr	0.41		3.30	1.80	10
453	Dryer	Pt	T.G. Scrubber	13	Cobalt	5,822	8,760	8.40E-05	lb/MMscf	79	168	MMscf/yr	1.62E-06	(b)	3.30E-06	4.96E-06 (d)	8
453	Dryer	Pt	T.G. Scrubber	14	Dichlorobenzene	5,822	8,760	1.20E-03	lb/MMscf	79	168	MMscf/yr	2.31E-05	(b)	4.71E-05	7.09E-05 (d)	7
453	Dryer	Pt	T.G. Scrubber	15	Fluoranthene	5,822	8,760	3.00E-06	lb/MMscf	79	168	MMscf/yr	5.77E-08	(b)	1.18E-07	1.77E-07 (d)	7
453	Dryer	Pt	T.G. Scrubber	16	Fluorene	5,822	8,760	2.80E-06	lb/MMscf	79	168	MMscf/yr	5.38E-08	(b)	1.10E-07	1.65E-07 (d)	7
453	Dryer	Pt	T.G. Scrubber	17	Fluorides	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	18	Formaldehyde	5,822	8,760	7.50E-02	lb/MMscf	79	168	MMscf/yr	1.44E-03	(b)	2.94E-03	4.43E-03 (d)	7
453	Dryer	Pt	T.G. Scrubber	21	Hexane	5,822	8,760	1.80E+00	lb/MMscf	79	168	MMscf/yr	3.46E-02	(b)	7.07E-02	1.06E-01 (d)	7
453	Dryer	Pt	T.G. Scrubber	22	Lead	5,822	8,760	5.00E-04	lb/MMscf	79	168	MMscf/yr	9.62E-06	(b)	1.96E-05	2.95E-05 (d)	9
453	Dryer	Pt	T.G. Scrubber	23	Manganese	5,822	8,760	3.80E-04	lb/MMscf	79	168	MMscf/yr	7.31E-06	(b)	1.49E-05	2.24E-05 (d)	8
453	Dryer	Pt	T.G. Scrubber	24	Mercury	5,822	8,760	2.60E-04	lb/MMscf	79	168	MMscf/yr	5.00E-06	(b)	1.02E-05	1.54E-05 (d)	8
453	Dryer	Pt	T.G. Scrubber	25	Naphthalene	5,822	8,760	6.10E-04	lb/MMscf	79	168	MMscf/yr	1.17E-05	(b)	2.39E-05	3.60E-05 (d)	7
453	Dryer	Pt	T.G. Scrubber	26	NH3	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	27	Nickel	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	28	NOx	5,822	8,760	100.0	lb/MMscf	79	168	MMscf/yr	1.69		3.93	7.40	10
453	Dryer	Pt	T.G. Scrubber	29	Phenanthrene	5,822	8,760	1.70E-05	lb/MMscf	79	168	MMscf/yr	3.27E-07	(b)	6.67E-07	1.00E-06 (d)	7
453	Dryer	Pt	T.G. Scrubber	30	PM	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	31	PM10	5,822	8,760	--		--	--		--		--	--	6
453	Dryer	Pt	T.G. Scrubber	32	Pyrene	5,822	8,760	5.00E-06	lb/MMscf	79	168	MMscf/yr	9.62E-08	(b)	1.96E-07	2.95E-07 (d)	7
453	Dryer	Pt	T.G. Scrubber	34	SO2	5,822	8,760	3.00E-01	lb/MMscf	79	168	MMscf/yr	1.60E-03		1.18E-02	7.00E-03	11
453	Dryer	Pt	T.G. Scrubber	35	Toluene	5,822	8,760	3.40E-03	lb/MMscf	79	168	MMscf/yr	6.54E-05	(b)	1.33E-04	2.01E-04 (d)	7
453	Dryer	Pt	T.G. Scrubber	36	VOC	5,822	8,760	5.50	lb/MMscf	79	168	MMscf/yr	0.11	(b)	0.22	0.32 (d)	9
*																	

Emissions Inventory Group ID: 18.0
Emissions Inventory Group Name: Granulation #2 Tailgas Scrubber Stack
Tier 1 Permit Group ID: 6.0

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0008% Cd in PM based on historical Simplot data. Emission Factor = 0.000008 x EF for PM.

2 Emission factors from source tests on 8/06, 4/05, and 9/04. Maximum emissions limit from Tier I permit No. T1-040313 for all Granulation #2 Stacks.

3 AP-42, Table 8.5.3-1 (July, 1993).

4 Assumes 0.0093% Ni in PM based on historical Simplot data. Emission Factor = 0.000093 x EF for PM.

5 Maximum emissions limit from Tier I permit No. T1-040313 or all Granulation #2 Stacks. Assumes PM10 = 82% PM. Emission Factor = 0.82 x EF for PM.

6 Source #450 includes Actual and Maximum emissions for this source.

7 AP-42, 5th ed., Table 1.4-3 (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 Btu/scf.

8 AP-42, 5th ed., Table 1.4-4 (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 Btu/scf.

9 AP-42, 5th ed., Table 1.4-2 for natural gas combusion devices (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.

10 AP-42, 5th ed., Table 1.4-1 for small uncontrolled natural gas combustion device (July 1998). Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions limit from Tier I permit No. T1-040313 for all Granulation #2 Stacks.

11 AP-42, 5th ed., Table 1.4-2 for natural gas combusion devices (July 1998). Scrubber efficiency of 50% based on engineering judgement. Emission Factor Adjustment = 0.5. Maximum fuel use based on rated capacity of 20 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions limit from Tier I permit No. T1-040313 for all granulation #2 Stacks.

Emissions Inventory Group ID: 19.0
Emissions Inventory Group Name: Granulation #2 Baghouse Stack
Tier 1 Permit Group ID: 6.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor	Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum		Actual	Maximum	Units		Actual [c]	Maximum [d]	
*															
461.1	Recycle Drag Conveyor	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
461.1	Recycle Drag Conveyor	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
461.1	Recycle Drag Conveyor	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
461.1	Recycle Drag Conveyor	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
461.1	Recycle Drag Conveyor	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
461.1	Recycle Drag Conveyor	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
462.1	Reject Hopper	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
462.1	Reject Hopper	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
462.1	Reject Hopper	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
462.1	Reject Hopper	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
462.1	Reject Hopper	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
462.1	Reject Hopper	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
463.1	Conveyor to Storage	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
463.1	Conveyor to Storage	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
463.1	Conveyor to Storage	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
463.1	Conveyor to Storage	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
463.1	Conveyor to Storage	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
463.1	Conveyor to Storage	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
464.1	Screens	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
464.1	Screens	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
464.1	Screens	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
464.1	Screens	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
464.1	Screens	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
464.1	Screens	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
464.2	Polishing Screen	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
464.2	Polishing Screen	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
464.2	Polishing Screen	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
464.2	Polishing Screen	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
464.2	Polishing Screen	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
464.2	Polishing Screen	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
465.1	Elevator to Granulator	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
465.1	Elevator to Granulator	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
465.1	Elevator to Granulator	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
465.1	Elevator to Granulator	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
465.1	Elevator to Granulator	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
465.1	Elevator to Granulator	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
466.1	Elevator to Screens	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
466.1	Elevator to Screens	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
466.1	Elevator to Screens	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
466.1	Elevator to Screens	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
466.1	Elevator to Screens	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
466.1	Elevator to Screens	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2

Emissions Inventory Group ID: 19.0
Emissions Inventory Group Name: Granulation #2 Baghouse Stack
Tier 1 Permit Group ID: 6.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor	Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum		Actual	Maximum	Units		Actual [c]	Maximum [d]	
467.1	Product Elevator	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	--	--	--		--	--	--	1
467.1	Product Elevator	Pt	Baghouse Stack	10	Chromium	5,822	8,760	--	--	--		--	--	--	1
467.1	Product Elevator	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	--	--	--		--	--	--	2
467.1	Product Elevator	Pt	Baghouse Stack	27	Nickel	5,822	8,760	--	--	--		--	--	--	1
467.1	Product Elevator	Pt	Baghouse Stack	30	PM	5,822	8,760	--	--	--		--	--	--	2
467.1	Product Elevator	Pt	Baghouse Stack	31	PM10	5,822	8,760	--	--	--		--	--	--	2
470.3	Cooler	Pt	Baghouse Stack	9	Cadmium	5,822	8,760	1.28E-04 lb/hr	5,822	8,760	hrs/yr	1.66E-04	3.73E-04	5.61E-04	3
470.3	Cooler	Pt	Baghouse Stack	10	Chromium	5,822	8,760	2.60E-04 lb/hr	5,822	8,760	hrs/yr	3.39E-04	7.58E-04	1.14E-03	4
470.3	Cooler	Pt	Baghouse Stack	17	Fluorides	5,822	8,760	5.20E-02 lb/hr	5,822	8,760	hrs/yr	--	0.15	--	5
470.3	Cooler	Pt	Baghouse Stack	26	NH3	5,822	8,760	--	--	--		--	--	--	6
470.3	Cooler	Pt	Baghouse Stack	27	Nickel	5,822	8,760	2.04E-04 lb/hr	5,822	8,760	hrs/yr	2.65E-04	5.94E-04	8.93E-04	7
470.3	Cooler	Pt	Baghouse Stack	30	PM	5,822	8,760	2.17 lb/hr	5,822	8,760	hrs/yr	--	6.3	--	5
470.3	Cooler	Pt	Baghouse Stack	31	PM10	5,822	8,760	1.78 lb/hr	5,822	8,760	hrs/yr	--	5.2	--	8
*															

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Source #470.3 includes Actual and Maximum emissions for this source.
2 Source #450 includes Maximum emissions and source #470.3 includes Actual emissions for this source.
3 Assumes 0.0059% Cd in PM based on historical Simplot data. Emission Factor = 0.000059 x EF for PM.
4 Assumes 0.0120% Cr in PM based on historical Simplot data. Emission Fáctor = 0.00012 x EF for PM.
5 Emission factors from source tests on 8/06, 4/05, and 9/04. Source #450 included maximum emissions for this source.
6 No significant NH3 emissions expected from this source. Source #450 includes Actual and Maximum emissions from the source group.
7 Assumes 0.0094% Ni in PM based on historical Simplot data. Emission Factor = 0.000094 x EF for PM.
8 Source #450 includes Maximum emissions for this source. Assumes PM10 = 82% PM. Emission Factor = 0.82 x EF for PM.

Emissions Inventory Group ID: 20.0
Emissions Inventory Group Name: Granulation #2 Process Fugitives
Tier 1 Permit Group ID: Subset of group 6

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
460	Scrubber Sump	Fug	Outside	17	Fluorides	5,822	8,760	7.35E-04	lb/day	243	365	days/yr	5.99E-05	8.93E-05	1.74E-04	1
470.1	Station 8 Sump	Fug	Outside	17	Fluorides	7,896	8,760	1.04E-03	lb/day	329	365	days/yr	5.63E-05	1.71E-04	2.22E-04	1
470.2	Cage Mills	Fug	Outside	9	Cadmium	5,822	8,760	2.00E-06	lb/ton	227,796	360,612	tons/yr	1.07E-04	2.28E-04	3.43E-04	2
470.2	Cage Mills	Fug	Outside	10	Chromium	5,822	8,760	2.00E-06	lb/ton	227,796	360,612	tons/yr	1.07E-04	2.28E-04	3.43E-04	3
470.2	Cage Mills	Fug	Outside	17	Fluorides	5,822	8,760	3.10E-04	lb/ton	227,796	360,612	tons/yr	1.66E-02	3.53E-02	5.31E-02	4
470.2	Cage Mills	Fug	Outside	27	Nickel	5,822	8,760	1.88E-06	lb/ton	227,796	360,612	tons/yr	1.01E-04	2.14E-04	3.22E-04	5
470.2	Cage Mills	Fug	Outside	30	PM	5,822	8,760	2.00E-02	lb/ton	227,796	360,612	tons/yr	1.07E+00	2.28E+00	3.43E+00	6
470.2	Cage Mills	Fug	Outside	31	PM10	5,822	8,760	3.00E-03	lb/ton	227,796	360,612	tons/yr	1.61E-01	3.42E-01	5.14E-01	7
470.4	Cooler	Fug	Outside	9	Cadmium	8,760	8,760	8.10E-06	lb/hr	500,000	500,000	ton/yr	6.01E-04	2.03E-03	2.63E-03	2
470.4	Cooler	Fug	Outside	10	Chromium	8,760	8,760	8.10E-06	lb/hr	500,000	500,000	ton/yr	6.01E-04	2.03E-03	2.63E-03	3
470.4	Cooler	Fug	Outside	17	Fluorides	8,760	8,760	1.26E-03	lb/hr	500,000	500,000	ton/yr	9.32E-02	3.14E-01	4.08E-01	4
470.4	Cooler	Fug	Outside	27	Nickel	8,760	8,760	7.61E-06	lb/hr	500,000	500,000	ton/yr	5.65E-04	1.90E-03	2.47E-03	5
470.4	Cooler	Fug	Outside	30	PM	8,760	8,760	8.10E-02	lb/hr	500,000	500,000	ton/yr	6.01E+00	2.03E+01	2.63E+01	8
470.4	Cooler	Fug	Outside	31	PM10	8,760	8,760	1.22E-02	lb/hr	500,000	500,000	ton/yr	9.02E-01	3.04E+00	3.95E+00	7
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)
(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Emission factor of 1.6 lb/acre-day was used (site specific factor). Scrubber Sump is 4' x 5' and Station 8 Sump has a diameter of 6'.
2 Assumes 0.01% Cd in PM based on historical Simplot data. Emission Factor = 0.0001 x EF for PM.
3 Assumes 0.01% Cr in PM based on historical Simplot data. Emission Factor = 0.0001 x EF for PM.
4 Fluorides = 1.55% PM (Simplot estimate). Emission Factor = 0.0155 x EF for PM.
5 Assumes 0.0094% Ni in PM based on historical Simplot data. Emission Factor = 0.000094 x EF for PM.
6 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993).
7 PM10 = 15% PM (Simplot estimate). Emission Factor = 0.15 x EF for PM.
8 AP-42, 5th ed., Table 8.3-2 for uncontrolled rotary drum granulator cooler (July 1993). Emission Factor Adjustment = 0.005 (assumes 0.5% escape the process as fugitives).

Emissions Inventory Group ID: 21.0
Emissions Inventory Group Name: Granulation #2 Storage and Loadout Fugitives
Tier 1 Permit Group ID: 6.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor	Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)			Reference Number
						Actual	Maximum		Actual	Maximum	Units			Actual [c]	Maximum		
*																	
471	Product Dump From Overhead	Fug	Inside	9	Cadmium	5,822	8,760	2.00E-07 lb/ton	153,325	456,250	tons/yr	1.04E-05	(b)	1.53E-05	3.03E-05	(d)	1
471	Product Dump From Overhead	Fug	Inside	10	Chromium	5,822	8,760	2.00E-07 lb/ton	153,325	456,250	tons/yr	1.04E-05	(b)	1.53E-05	3.03E-05	(d)	2
471	Product Dump From Overhead	Fug	Inside	17	Fluorides	5,822	8,760	3.10E-05 lb/ton	153,325	456,250	tons/yr	8.80E-02		2.38E-03	3.85E-01		3
471	Product Dump From Overhead	Fug	Inside	27	Nickel	5,822	8,760	1.88E-07 lb/ton	153,325	456,250	tons/yr	9.79E-06	(b)	1.44E-05	2.85E-05	(d)	4
471	Product Dump From Overhead	Fug	Inside	30	PM	5,822	8,760	2.00E-03 lb/ton	153,325	456,250	tons/yr	8.79		1.53E-01	38.49		5
471	Product Dump From Overhead	Fug	Inside	31	PM10	5,822	8,760	3.00E-04 lb/ton	153,325	456,250	tons/yr	1.06		2.30E-02	4.63		6
472	Front End Loader Operation	Fug	Inside	9	Cadmium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	1
472	Front End Loader Operation	Fug	Inside	10	Chromium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	2
472	Front End Loader Operation	Fug	Inside	17	Fluorides	1,500	8,760	3.10E-05 lb/ton	139,711	456,250	tons/yr	--		2.17E-03	--		7
472	Front End Loader Operation	Fug	Inside	27	Nickel	1,500	8,760	1.88E-07 lb/ton	139,711	456,250	tons/yr	7.43E-05	(b)	1.31E-05	7.67E-05	(d)	4
472	Front End Loader Operation	Fug	Inside	30	PM	1,500	8,760	2.00E-03 lb/ton	139,711	456,250	tons/yr	--		1.40E-01	--		8
472	Front End Loader Operation	Fug	Inside	31	PM10	1,500	8,760	3.00E-04 lb/ton	139,711	456,250	tons/yr	--		2.10E-02	--		9
473	Underground Conveyer	Fug	Loading Vents	9	Cadmium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	1
473	Underground Conveyer	Fug	Loading Vents	10	Chromium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	2
473	Underground Conveyer	Fug	Loading Vents	17	Fluorides	1,500	8,760	3.10E-05 lb/ton	139,711	456,250	tons/yr	--		2.17E-03	--		7
473	Underground Conveyer	Fug	Loading Vents	27	Nickel	1,500	8,760	1.88E-07 lb/ton	139,711	456,250	tons/yr	7.43E-05	(b)	1.31E-05	7.67E-05	(d)	4
473	Underground Conveyer	Fug	Loading Vents	30	PM	1,500	8,760	2.00E-03 lb/ton	139,711	456,250	tons/yr	--		1.40E-01	--		8
473	Underground Conveyer	Fug	Loading Vents	31	PM10	1,500	8,760	3.00E-04 lb/ton	139,711	456,250	tons/yr	--		2.10E-02	--		9
474	Elevator	Fug	Inside	9	Cadmium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	1
474	Elevator	Fug	Inside	10	Chromium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	2
474	Elevator	Fug	Inside	17	Fluorides	1,500	8,760	3.10E-05 lb/ton	139,711	456,250	tons/yr	--		2.17E-03	--		7
474	Elevator	Fug	Inside	27	Nickel	1,500	8,760	1.88E-07 lb/ton	139,711	456,250	tons/yr	7.43E-05	(b)	1.31E-05	7.67E-05	(d)	4
474	Elevator	Fug	Inside	30	PM	1,500	8,760	2.00E-03 lb/ton	139,711	456,250	tons/yr	--		1.40E-01	--		8
474	Elevator	Fug	Inside	31	PM10	1,500	8,760	3.00E-04 lb/ton	139,711	456,250	tons/yr	--		2.10E-02	--		9
475	Crossover Belt	Fug	Outside/Covered	9	Cadmium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	1
475	Crossover Belt	Fug	Outside/Covered	10	Chromium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	2
475	Crossover Belt	Fug	Outside/Covered	17	Fluorides	1,500	8,760	3.10E-05 lb/ton	139,711	456,250	tons/yr	--		2.17E-03	--		7
475	Crossover Belt	Fug	Outside/Covered	27	Nickel	1,500	8,760	1.88E-07 lb/ton	139,711	456,250	tons/yr	7.43E-05	(b)	1.31E-05	7.67E-05	(d)	4
475	Crossover Belt	Fug	Outside/Covered	30	PM	1,500	8,760	2.00E-03 lb/ton	139,711	456,250	tons/yr	--		1.40E-01	--		8
475	Crossover Belt	Fug	Outside/Covered	31	PM10	1,500	8,760	3.00E-04 lb/ton	139,711	456,250	tons/yr	--		2.10E-02	--		9
476	Bulking Loadout	Fug	Outside/Covered	9	Cadmium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	1
476	Bulking Loadout	Fug	Outside/Covered	10	Chromium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	2
476	Bulking Loadout	Fug	Outside/Covered	17	Fluorides	1,500	8,760	3.10E-05 lb/ton	139,711	456,250	tons/yr	--		2.17E-03	--		7
476	Bulking Loadout	Fug	Outside/Covered	27	Nickel	1,500	8,760	1.88E-07 lb/ton	139,711	456,250	tons/yr	7.43E-05	(b)	1.31E-05	7.67E-05	(d)	4
476	Bulking Loadout	Fug	Outside/Covered	30	PM	1,500	8,760	2.00E-03 lb/ton	139,711	456,250	tons/yr	--		1.40E-01	--		8
476	Bulking Loadout	Fug	Outside/Covered	31	PM10	1,500	8,760	3.00E-04 lb/ton	139,711	456,250	tons/yr	--		2.10E-02	--		9
477	Screens	Fug	Inside	9	Cadmium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	1
477	Screens	Fug	Inside	10	Chromium	1,500	8,760	2.00E-07 lb/ton	139,711	456,250	tons/yr	7.91E-05	(b)	1.40E-05	8.16E-05	(d)	2
477	Screens	Fug	Inside	17	Fluorides	1,500	8,760	3.10E-05 lb/ton	139,711	456,250	tons/yr	--		2.17E-03	--		7
477	Screens	Fug	Inside	27	Nickel	1,500	8,760	1.88E-07 lb/ton	139,711	456,250	tons/yr	7.43E-05	(b)	1.31E-05	7.67E-05	(d)	4
477	Screens	Fug	Inside	30	PM	1,500	8,760	2.00E-03 lb/ton	139,711	456,250	tons/yr	--		1.40E-01	--		8
477	Screens	Fug	Inside	31	PM10	1,500	8,760	3.00E-04 lb/ton	139,711	456,250	tons/yr	--		2.10E-02	--		9
*																	

Emissions Inventory Group ID: 21.0
Emissions Inventory Group Name: Granulation #2 Storage and Loadout Fugitives
Tier 1 Permit Group ID: 6.0

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.01% Cd in PM based on historical Simplot data. Emission Factor = 0.0001 x EF for PM.

2 Assumes 0.01% Cr in PM based on historical Simplot data. Emission Factor = 0.0001 x EF for PM.

3 Fluorides = 1.55% PM (Simplot estimate). Emission Factor = 0.0155 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

4 Assumes 0.0094% Ni in PM based on historical Simplot data. Emission Factor = 0.000094 x EF for PM.

5 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building/covering particulate control efficiency = 90% for particulate emissions. Emission Factor Adjustment = 0.1. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

6 PM10 = 15% PM (Simplot estimate). Emission Factor = 0.15 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

7 Fluorides = 1.55% PM (Simplot estimate). Emission Factor = 0.0155 x EF for PM. Source #471 Maximum emissions include this source.

8 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building/covering particulate control efficiency = 90% for particulate emissions. Emission Factor Adjustment = 0.1. Source #471 Maximum emissions include this source.

9 PM10 = 15% PM (Simplot estimate). Emission Factor = 0.15 x EF for PM. Source #471 Maximum emissions include this source.

Emissions Inventory Group ID: 22.0
Emissions Inventory Group Name: Granulation #3 Stacks
Tier 1 Permit Group ID: 7.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
700	Mixer	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	1.15E-04	lb/hr	5,304	8,760	hrs/yr	1.50E-04	(b)	3.05E-04	5.04E-04 (d)	1
700	Mixer	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	1.76	lb/hr	5,304	8,760	hrs/yr	1.28		4.67	5.63	2
700	Mixer	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	1.19E-04	lb/hr	5,304	8,760	hrs/yr	1.54E-04	(b)	3.15E-04	5.20E-04 (d)	3
700	Mixer	Pt	Gran. #3 Stack	30	PM	5,304	8,760	3.49	lb/hr	5,304	8,760	hrs/yr	7.0		9.3	30.7	4
700	Mixer	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	2.86	lb/hr	5,304	8,760	hrs/yr	5.7		7.6	25.0	5
701	Blender/Granulator	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
701	Blender/Granulator	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
701	Blender/Granulator	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
701	Blender/Granulator	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
701	Blender/Granulator	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
703	Blunger	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
703	Blunger	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
703	Blunger	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
703	Blunger	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
703	Blunger	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
706.1	Limestone Bin Augers	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
706.1	Limestone Bin Augers	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
706.1	Limestone Bin Augers	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
706.1	Limestone Bin Augers	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
706.1	Limestone Bin Augers	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
707.1	Hardy Scale	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
707.1	Hardy Scale	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
707.1	Hardy Scale	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
707.1	Hardy Scale	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
707.1	Hardy Scale	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
708.2	Screens	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
708.2	Screens	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
708.2	Screens	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
708.2	Screens	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
708.2	Screens	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
708.3	Rotex Screen (Conveyors)	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
708.3	Rotex Screen (Conveyors)	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
708.3	Rotex Screen (Conveyors)	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
708.3	Rotex Screen (Conveyors)	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
708.3	Rotex Screen (Conveyors)	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
709.1	Fines Loadout (Recycle Drag)	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
709.1	Fines Loadout (Recycle Drag)	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
709.1	Fines Loadout (Recycle Drag)	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
709.1	Fines Loadout (Recycle Drag)	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
709.1	Fines Loadout (Recycle Drag)	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6

Emissions Inventory Group ID: 22.0
Emissions Inventory Group Name: Granulation #3 Stacks
Tier 1 Permit Group ID: 7.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
710.1	Production Elevator (screen feed elevator)	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
710.1	Production Elevator (screen feed elevator)	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
710.1	Production Elevator (screen feed elevator)	Pt	Gran. #3 Stack	27 -	Nickel	5,304	8,760	--		--	--		--		--	--	6
710.1	Production Elevator (screen feed elevator)	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
710.1	Production Elevator (screen feed elevator)	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
712.1	Reject Elevator	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
712.1	Reject Elevator	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
712.1	Reject Elevator	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
712.1	Reject Elevator	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
712.1	Reject Elevator	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
713	Cage Mill	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
713	Cage Mill	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
713	Cage Mill	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
713	Cage Mill	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
713	Cage Mill	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
720	Dryer	Pt	Gran. #3 Stack	1	2-Methylnaphthalene	5,304	8,760	2.40E-05	lb/MMscf	123	295	MMscf/yr	8.08E-07	(b)	1.47E-06	2.43E-06 (d)	7
720	Dryer	Pt	Gran. #3 Stack	5	Arsenic	5,304	8,760	2.00E-04	lb/MMscf	123	295	MMscf/yr	6.73E-06	(b)	1.23E-05	2.03E-05 (d)	8
720	Dryer	Pt	Gran. #3 Stack	6	Benzene	5,304	8,760	2.10E-03	lb/MMscf	123	295	MMscf/yr	7.07E-05	(b)	1.29E-04	2.13E-04 (d)	7
720	Dryer	Pt	Gran. #3 Stack	9	Cadmium	5,304	8,760	--		--	--		--		--	--	6
720	Dryer	Pt	Gran. #3 Stack	10	Chromium	5,304	8,760	1.40E-03	lb/MMscf	123	295	MMscf/yr	4.71E-05	(b)	8.58E-05	1.42E-04 (d)	8
720	Dryer	Pt	Gran. #3 Stack	12	CO	5,304	8,760	84.0	lb/MMscf	123	295	MMscf/yr	2.90	(b)	5.15	12.70 (d)	9
720	Dryer	Pt	Gran. #3 Stack	13	Cobalt	5,304	8,760	8.40E-05	lb/MMscf	123	295	MMscf/yr	2.83E-06	(b)	5.15E-06	8.51E-06 (d)	8
720	Dryer	Pt	Gran. #3 Stack	14	Dichlorobenzene	5,304	8,760	1.20E-03	lb/MMscf	123	295	MMscf/yr	4.04E-05	(b)	7.36E-05	1.22E-04 (d)	7
720	Dryer	Pt	Gran. #3 Stack	15	Fluoranthene	5,304	8,760	3.00E-06	lb/MMscf	123	295	MMscf/yr	1.01E-07	(b)	1.84E-07	3.04E-07 (d)	7
720	Dryer	Pt	Gran. #3 Stack	16	Fluorene	5,304	8,760	2.80E-06	lb/MMscf	123	295	MMscf/yr	9.42E-08	(b)	1.72E-07	2.84E-07 (d)	7
720	Dryer	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--		--	--	6
720	Dryer	Pt	Gran. #3 Stack	18	Formaldehyde	5,304	8,760	7.50E-02	lb/MMscf	123	295	MMscf/yr	2.52E-03	(b)	4.60E-03	7.60E-03 (d)	7
720	Dryer	Pt	Gran. #3 Stack	21	Hexane	5,304	8,760	1.80E+00	lb/MMscf	123	295	MMscf/yr	6.06E-02	(b)	1.10E-01	1.82E-01 (d)	7
720	Dryer	Pt	Gran. #3 Stack	22	Lead	5,304	8,760	5.00E-04	lb/MMscf	123	295	MMscf/yr	1.68E-05	(b)	3.07E-05	5.06E-05 (d)	10
720	Dryer	Pt	Gran. #3 Stack	23	Manganese	5,304	8,760	3.80E-04	lb/MMscf	123	295	MMscf/yr	1.28E-05	(b)	2.33E-05	3.85E-05 (d)	8
720	Dryer	Pt	Gran. #3 Stack	24	Mercury	5,304	8,760	2.60E-04	lb/MMscf	123	295	MMscf/yr	8.75E-06	(b)	1.59E-05	2.63E-05 (d)	8
720	Dryer	Pt	Gran. #3 Stack	25	Naphthalene	5,304	8,760	6.10E-04	lb/MMscf	123	295	MMscf/yr	2.05E-05	(b)	3.74E-05	6.18E-05 (d)	7
720	Dryer	Pt	Gran. #3 Stack	27	Nickel	5,304	8,760	--		--	--		--		--	--	6
720	Dryer	Pt	Gran. #3 Stack	28	NOx	5,304	8,760	100.0	lb/MMscf	123	295	MMscf/yr	3.40		6.13	14.90	9
720	Dryer	Pt	Gran. #3 Stack	29	Phenanthrene	5,304	8,760	1.70E-05	lb/MMscf	123	295	MMscf/yr	5.72E-07	(b)	1.04E-06	1.72E-06 (d)	7
720	Dryer	Pt	Gran. #3 Stack	30	PM	5,304	8,760	--		--	--		--		--	--	6
720	Dryer	Pt	Gran. #3 Stack	31	PM10	5,304	8,760	--		--	--		--		--	--	6
720	Dryer	Pt	Gran. #3 Stack	32	Pyrene	5,304	8,760	5.00E-06	lb/MMscf	123	295	MMscf/yr	1.68E-07	(b)	3.07E-07	5.06E-07 (d)	7
720	Dryer	Pt	Gran. #3 Stack	34	SO2	5,304	8,760	3.00E-01	lb/MMscf	123	295	MMscf/yr	2.00E-02		1.84E-02	9.00E-02	11
720	Dryer	Pt	Gran. #3 Stack	35	Toluene	5,304	8,760	3.40E-03	lb/MMscf	123	295	MMscf/yr	1.14E-04	(b)	2.08E-04	3.44E-04 (d)	7
720	Dryer	Pt	Gran. #3 Stack	36	VOC	5,304	8,760	5.50	lb/MMscf	123	295	MMscf/yr	0.19		0.34	0.90	12

Emissions Inventory Group ID: 22.0
Emissions Inventory Group Name: Granulation #3 Stacks
Tier 1 Permit Group ID: 7.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum	
724	Diatomaceous Earth Silo	Pt	DE Fabric Filter	30	PM	320	320	5.14E-02	lbs/hr	320	8,760	hours/yr	2.80E-01	8.23E-03	1.20E+00	13
724	Diatomaceous Earth Silo	Pt	DE Fabric Filter	31	PM10	320	320	5.14E-02	lbs/hr	320	8,760	hours/yr	2.80E-01	8.23E-03	1.20E+00	14
725	Defluorination Reactors	Pt	Gran. #3 Stack	17	Fluorides	5,304	8,760	--		--	--		--	--	--	15
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0033% Cd in PM based on historical Simplot data. Emission Factor = 0.000033 x EF for PM.
2 Emission factor from source tests on 10/05, 3/05, and 12/04. Maximum emissions from Tier I permit No. T1-040313 for all Granulation #3 Stacks.
3 Assumes 0.0034% Ni in PM based on historical Simplot data. Emission Factor = 0.000034 x EF for PM.
4 Emission factor from source tests on 4/06, 3/05, and 10/04. Maximum emissions from Tier I permit No. T1-040313 for all Granulation #3 Stacks.
5 Maximum emissions from Tier I permit No. T1-040313 for all Granulation #3 Stacks. Assumes PM10 = 82% PM. Emission Factor = 0.82 x EF for PM.
6 Source #700 includes Actual and Maximum emissions for this source.
7 AP-42, 5th ed., Table 1.4-3 (July 1998). Maximum fuel use based on rated capacity of 35 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
8 AP-42, 5th ed., Table 1.4-4 (July 1998). Maximum fuel use based on rated capacity of 35 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
9 AP-42, 5th ed., Section 1.4-1 for small uncontrolled natural gas combustion source (July 1998). Maximum fuel use based on rated capacity of 35 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions from Tier I permit No. T1-040313 for all Granulation #3 Stacks.
10 AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 35 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
11 AP-42, 5th ed., Table 1.4-2 for natural gas combusion devices (July 1998). Scrubber efficiency of 50% based on engineering judgement. Emission Factor Adjustment = 0.5. Maximum fuel use based on rated capacity of 35 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions from Tier I permit No. T1-040313 for all Granulation #3 Stacks.
12 AP-42, 5th ed., Table 1.4-2 for natural gas combustion source (July 1998). Maximum fuel use based on rated capacity of 35 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions from Tier I permit No. T1-040313 for all Granulation #3 Stacks.
13 Annual and Maximum emissions in lbs/hr and tons/yr from PTC Application (1/25/99).
14 Annual emissions from PTC Application (1/25/99). Maximum emissions from Tier I permit No. T1-040313 for Diatomaceous earth baghouse stack.
15 Source #700 includes Actual and Maximum emissions for this source. Granulation #3 fluoride emissions (downstream) are lower when this system is operating.

Summary of Radionuclide Emissions
J.R. Simplot Don Plant, Pocatello, Idaho

Emissions Inventory Group ID	Emissions Inventory Group Name	Emissions (Ci/hr) [a]	Emissions (Ci/yr) [b]	Reference Group [1]
3.0	Phosphoric Acid Plant Stack	1.72E-07	1.50E-03	
13.0	Granulation #1 Dryer Stack	1.21E-06	1.06E-02	
14.0	Granulation #1 Reactor/Granulator Stack	(1)	(1)	Group 13
15.0	Granulation #1 Baghouse Stack	(1)	(1)	Group 13
16.0	Granulation #1 Process Fugitives	5.20E-08	3.44E-04	
17.0	Granulation #1 Storage and Loadout	3.57E-07	3.13E-03	
18.0	Granulation #2 Tailgas Scrubber Stack	1.12E-06	9.80E-03	
19.0	Granulation #2 Baghouse Stack	(1)	(1)	Group 18
20.0	Granulation #2 Process Fugitives	3.60E-07	3.02E-03	
21.0	Granulation #2 Storage and Loadout	4.47E-07	3.91E-03	
22.0	Granulation #3 Stack	3.70E-07	3.24E-03	
24.0	Granulation #3 Process Fugitives	7.69E-09	4.08E-05	
25.0	Granulation #3 Storage and Loadout	3.56E-08	3.05E-04	
33.0	Water Reclaim System Cooling Towers	7.17E-06	6.28E-02	
42.0	Gypsum Stack/Pond and Transport	1.32E-07	1.15E-03	

Notes:

(a) Emissions (Ci/hr) = Σ (Maximum Hourly PM Emissions from Group i [lb/hr]) x (453.59 grams/lb) x (112 pCi/gram) x (10^{12} Ci/pCi) (2)

(b) Emissions (Ci/yr) = Σ (Maximum Annual PM Emissions from Group i [ton/yr]) x (2000 lbs/ton) x (453.59 grams/lb) x (112 pCi/gram) x (10^{12} Ci/pCi) (2)

References:

(1) Emissions for the source are included in the indicated group.

(2) 112 pCi/gram obtained from *Radiological Surveys of Idaho Phosphate Ore Processing - the Wet Process Plant* (ORP/LV-78-1), April, 1978.

Emissions Inventory Group ID: 23.0
Emissions Inventory Group Name: Granulation #3 Limestone Silos
Tier 1 Permit Group ID: 7.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
705	Limestone Bins	Pt	Limestone Baghouse(s)	9	Cadmium	1,000	8,760	4.72E-11	lb/dscf	1.43E+08	1.26E+09	dscf/yr	8.79E-06	(b)	3.38E-06	2.96E-05 (d)	1
705	Limestone Bins	Pt	Limestone Baghouse(s)	27	Nickel	1,000	8,760	4.86E-11	lb/dscf	1.43E+08	1.26E+09	dscf/yr	9.06E-06	(b)	3.48E-06	3.05E-05 (d)	2
705	Limestone Bins	Pt	Limestone Baghouse(s)	30	PM	1,000	8,760	1.43E-06	lb/dscf	1.43E+08	1.26E+09	dscf/yr	0.266	(b)	0.102	0.90 (d)	3
705	Limestone Bins	Pt	Limestone Baghouse(s)	31	PM10	1,000	8,760	1.21E-06	lb/dscf	1.43E+08	1.26E+09	dscf/yr	0.226	(b)	0.087	0.76 (d)	4
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Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0033% Cd in PM based on historical Simplot data. Emission Factor = 0.000033 x EF for PM.
2 Assumes 0.0034% Ni in PM based on historical Simplot data. Emission Factor = 0.000034 x EF for PM.
3 Emission factor based on engineering estimate of maximum outlet grain loading for baghouse, 0.01 gr/scf, 1195 scfm.
4 Assumes PM10= 85% PM. Emission Factor = 0.85 x EF for PM.

Emissions Inventory Group ID: 24.0
Emissions Inventory Group Name: Granulation #3 Process Fugitives
Tier 1 Permit Group ID: Subset of group 7

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
715	Main Stack Sump	Fug	Outside	17	Fluorides	5,304	8,760	1.47E-04	lb/day	221	365	days/yr	7.96E-06	1.62E-05	2.68E-05	1
717	Feed Acid Sump	Fug	Inside	17	Fluorides	5,304	8,760	5.88E-04	lb/day	221	365	days/yr	3.18E-05	6.49E-05	1.07E-04	1
719	Dryer Crossover Belt	Fug	Inside	9	Cadmium	5,304	8,760	6.60E-08	lb/ton	189,620	663,000	tons/yr	5.00E-06	6.26E-06	1.32E-05	2
719	Dryer Crossover Belt	Fug	Inside	17	Fluorides	5,304	8,760	2.40E-05	lb/ton	189,620	663,000	tons/yr	1.82E-03	2.28E-03	4.82E-03	3
719	Dryer Crossover Belt	Fug	Inside	27	Nickel	5,304	8,760	6.80E-08	lb/ton	189,620	663,000	tons/yr	5.15E-06	6.45E-06	1.36E-05	4
719	Dryer Crossover Belt	Fug	Inside	30	PM	5,304	8,760	2.00E-03	lb/ton	189,620	663,000	tons/yr	1.51E-01	1.90E-01	4.01E-01	5
719	Dryer Crossover Belt	Fug	Inside	31	PM10	5,304	8,760	3.00E-04	lb/ton	189,620	663,000	tons/yr	2.27E-02	2.84E-02	6.02E-02	6
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Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Emission factor of 1.6 lb/acre-day was used (site specific factor). Main Stack Sump is 2' x 2' and Feed Acid Sump is 4' x 4'.
2 Assumes 0.0033% Cd in PM based on historical Simplot data. Emission Factor = 0.000033 x EF for PM.
3 Emission factors extracted from Westar Emission Inventory. Fluorides = 1.2% PM (Westar Inventory); Emission Factor = 0.012 x EF for PM.
4 Assumes 0.0034% Ni in PM based on historical Simplot data. Emission Factor = 0.000034 x EF for PM.
5 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July, 1993). Building Control Efficiency = 90%. Emission Factor Adjustment = 0.1.
6 Emission factors extracted from Westar Emission Inventory. PM10 = 15% PM (Westar Inventory). Emission Factor = 0.15 x EF for PM.

Emissions Inventory Group ID: 25.0
Emissions Inventory Group Name: Granulation #3 Storage and Loadout Fugitives
Tier 1 Permit Group ID: 7.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
750	Conveying (South)	Fug	Inside	9	Cadmium	5,304	8,760	6.60E-08	lb/ton	47,405	1,752,000	tons/yr	1.32E-05	(b)	1.56E-06	3.50E-05 (d)	1
750	Conveying (South)	Fug	Inside	17	Fluorides	5,304	8,760	2.40E-05	lb/ton	47,405	1,752,000	tons/yr	0.01		5.69E-04	0.02	2
750	Conveying (South)	Fug	Inside	27	Nickel	5,304	8,760	6.80E-08	lb/ton	47,405	1,752,000	tons/yr	1.36E-05	(b)	1.61E-06	3.61E-05 (d)	3
750	Conveying (South)	Fug	Inside	30	PM	5,304	8,760	2.00E-03	lb/ton	47,405	1,752,000	tons/yr	0.70		4.74E-02	3.0	4
750	Conveying (South)	Fug	Inside	31	PM10	5,304	8,760	3.00E-04	lb/ton	47,405	1,752,000	tons/yr	0.10		7.11E-03	0.5	5
751	Conveyor Drop (South)	Fug	Inside	9	Cadmium	5,304	8,760	6.60E-08	lb/ton	39,448	1,752,000	tons/yr	1.32E-05	(b)	1.30E-06	3.50E-05 (d)	1
751	Conveyor Drop (South)	Fug	Inside	17	Fluorides	5,304	8,760	2.40E-05	lb/ton	39,448	1,752,000	tons/yr	--		4.73E-04	--	6
751	Conveyor Drop (South)	Fug	Inside	27	Nickel	5,304	8,760	6.80E-08	lb/ton	39,448	1,752,000	tons/yr	1.36E-05	(b)	1.34E-06	3.61E-05 (d)	3
751	Conveyor Drop (South)	Fug	Inside	30	PM	5,304	8,760	2.00E-03	lb/ton	39,448	1,752,000	tons/yr	--		3.94E-02	--	7
751	Conveyor Drop (South)	Fug	Inside	31	PM10	5,304	8,760	3.00E-04	lb/ton	39,448	1,752,000	tons/yr	--		5.92E-03	--	8
752	Front End Loader Operations (South)	Fug	Inside	9	Cadmium	5,304	8,760	6.60E-08	lb/ton	37,976	1,752,000	tons/yr	1.32E-05	(b)	1.25E-06	3.50E-05 (d)	1
752	Front End Loader Operations (South)	Fug	Inside	17	Fluorides	5,304	8,760	2.40E-05	lb/ton	37,976	1,752,000	tons/yr	--		4.56E-04	--	6
752	Front End Loader Operations (South)	Fug	Inside	27	Nickel	5,304	8,760	6.80E-08	lb/ton	37,976	1,752,000	tons/yr	1.36E-05	(b)	1.29E-06	3.61E-05 (d)	3
752	Front End Loader Operations (South)	Fug	Inside	30	PM	5,304	8,760	2.00E-03	lb/ton	37,976	1,752,000	tons/yr	--		3.80E-02	--	7
752	Front End Loader Operations (South)	Fug	Inside	31	PM10	5,304	8,760	3.00E-04	lb/ton	37,976	1,752,000	tons/yr	--		5.70E-03	--	8
753	Bulking Elevator (South)	Fug	Inside	9	Cadmium	5,304	8,760	6.60E-08	lb/ton	37,976	1,752,000	tons/yr	1.32E-05	(b)	1.25E-06	3.50E-05 (d)	1
753	Bulking Elevator (South)	Fug	Inside	17	Fluorides	5,304	8,760	2.40E-05	lb/ton	37,976	1,752,000	tons/yr	--		4.56E-04	--	6
753	Bulking Elevator (South)	Fug	Inside	27	Nickel	5,304	8,760	6.80E-08	lb/ton	37,976	1,752,000	tons/yr	1.36E-05	(b)	1.29E-06	3.61E-05 (d)	3
753	Bulking Elevator (South)	Fug	Inside	30	PM	5,304	8,760	2.00E-03	lb/ton	37,976	1,752,000	tons/yr	--		3.80E-02	--	7
753	Bulking Elevator (South)	Fug	Inside	31	PM10	5,304	8,760	3.00E-04	lb/ton	37,976	1,752,000	tons/yr	--		5.70E-03	--	8
754	Crossover Belt (South)	Fug	Outside	9	Cadmium	5,304	8,760	6.60E-07	lb/ton	37,976	1,752,000	tons/yr	1.32E-04	(b)	1.25E-05	3.50E-04 (d)	1
754	Crossover Belt (South)	Fug	Outside	17	Fluorides	5,304	8,760	2.40E-04	lb/ton	37,976	1,752,000	tons/yr	--		4.56E-03	--	6
754	Crossover Belt (South)	Fug	Outside	27	Nickel	5,304	8,760	6.80E-07	lb/ton	37,976	1,752,000	tons/yr	1.36E-04	(b)	1.29E-05	3.61E-04 (d)	3
754	Crossover Belt (South)	Fug	Outside	30	PM	5,304	8,760	2.00E-02	lb/ton	37,976	1,752,000	tons/yr	--		3.80E-01	--	9
754	Crossover Belt (South)	Fug	Outside	31	PM10	5,304	8,760	3.00E-03	lb/ton	37,976	1,752,000	tons/yr	--		5.70E-02	--	8
755	East Dry Bulking Station (South)	Fug	Outside	9	Cadmium	5,304	8,760	6.60E-07	lb/ton	37,976	1,752,000	tons/yr	1.32E-04	(b)	1.25E-05	3.50E-04 (d)	1
755	East Dry Bulking Station (South)	Fug	Outside	17	Fluorides	5,304	8,760	2.40E-04	lb/ton	37,976	1,752,000	tons/yr	--		4.56E-03	--	6
755	East Dry Bulking Station (South)	Fug	Outside	27	Nickel	5,304	8,760	6.80E-07	lb/ton	37,976	1,752,000	tons/yr	1.36E-04	(b)	1.29E-05	3.61E-04 (d)	3
755	East Dry Bulking Station (South)	Fug	Outside	30	PM	5,304	8,760	2.00E-02	lb/ton	37,976	1,752,000	tons/yr	--		3.80E-01	--	9
755	East Dry Bulking Station (South)	Fug	Outside	31	PM10	5,304	8,760	3.00E-03	lb/ton	37,976	1,752,000	tons/yr	--		5.70E-02	--	8

Emissions Inventory Group ID: 25.0
Emissions Inventory Group Name: Granulation #3 Storage and Loadout Fugitives
Tier 1 Permit Group ID: 7.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
770	Conveying (North)	Fug	Inside	9	Cadmium	1,000	8,760	6.60E-08	lb/ton	15,914	1,752,000	tons/yr	1.32E-05	(b)	5.25E-07	6.60E-06 (d)	1
770	Conveying (North)	Fug	Inside	17	Fluorides	1,000	8,760	2.40E-05	lb/ton	15,914	1,752,000	tons/yr	--		1.91E-04	--	6
770	Conveying (North)	Fug	Inside	27	Nickel	1,000	8,760	6.80E-08	lb/ton	15,914	1,752,000	tons/yr	1.36E-05	(b)	5.41E-07	6.80E-06 (d)	3
770	Conveying (North)	Fug	Inside	30	PM	1,000	8,760	2.00E-03	lb/ton	15,914	1,752,000	tons/yr	--		1.59E-02	--	7
770	Conveying (North)	Fug	Inside	31	PM10	1,000	8,760	3.00E-04	lb/ton	15,914	1,752,000	tons/yr	--		2.39E-03	--	8
771	Conveyor Drop (North)	Fug	Inside	9	Cadmium	1,000	8,760	6.60E-08	lb/ton	7,957	1,752,000	tons/yr	1.32E-05	(b)	2.63E-07	6.60E-06 (d)	1
771	Conveyor Drop (North)	Fug	Inside	17	Fluorides	1,000	8,760	2.40E-05	lb/ton	7,957	1,752,000	tons/yr	--		9.55E-05	--	6
771	Conveyor Drop (North)	Fug	Inside	27	Nickel	1,000	8,760	6.80E-08	lb/ton	7,957	1,752,000	tons/yr	1.36E-05	(b)	2.71E-07	6.80E-06 (d)	3
771	Conveyor Drop (North)	Fug	Inside	30	PM	1,000	8,760	2.00E-03	lb/ton	7,957	1,752,000	tons/yr	--		7.96E-03	--	7
771	Conveyor Drop (North)	Fug	Inside	31	PM10	1,000	8,760	3.00E-04	lb/ton	7,957	1,752,000	tons/yr	--		1.19E-03	--	8
772	Front End Loader Operations (North)	Fug	Inside	9	Cadmium	1,000	8,760	6.60E-08	lb/ton	7,957	1,752,000	tons/yr	1.32E-05	(b)	2.63E-07	6.60E-06 (d)	1
772	Front End Loader Operations (North)	Fug	Inside	17	Fluorides	1,000	8,760	2.40E-05	lb/ton	7,957	1,752,000	tons/yr	--		9.55E-05	--	6
772	Front End Loader Operations (North)	Fug	Inside	27	Nickel	1,000	8,760	6.80E-08	lb/ton	7,957	1,752,000	tons/yr	1.36E-05	(b)	2.71E-07	6.80E-06 (d)	3
772	Front End Loader Operations (North)	Fug	Inside	30	PM	1,000	8,760	2.00E-03	lb/ton	7,957	1,752,000	tons/yr	--		7.96E-03	--	7
772	Front End Loader Operations (North)	Fug	Inside	31	PM10	1,000	8,760	3.00E-04	lb/ton	7,957	1,752,000	tons/yr	--		1.19E-03	--	8
773	Bulking Elevator (North)	Fug	Inside	9	Cadmium	1,000	8,760	6.60E-08	lb/ton	7,957	1,752,000	tons/yr	1.32E-05	(b)	2.63E-07	6.60E-06 (d)	1
773	Bulking Elevator (North)	Fug	Inside	17	Fluorides	1,000	8,760	2.40E-05	lb/ton	7,957	1,752,000	tons/yr	--		9.55E-05	--	6
773	Bulking Elevator (North)	Fug	Inside	27	Nickel	1,000	8,760	6.80E-08	lb/ton	7,957	1,752,000	tons/yr	1.36E-05	(b)	2.71E-07	6.80E-06 (d)	3
773	Bulking Elevator (North)	Fug	Inside	30	PM	1,000	8,760	2.00E-03	lb/ton	7,957	1,752,000	tons/yr	--		7.96E-03	--	7
773	Bulking Elevator (North)	Fug	Inside	31	PM10	1,000	8,760	3.00E-04	lb/ton	7,957	1,752,000	tons/yr	--		1.19E-03	--	8
774	Crossover Belt (North)	Fug	Outside	9	Cadmium	1,000	8,760	6.60E-07	lb/ton	7,957	1,752,000	tons/yr	1.32E-04	(b)	2.63E-06	6.60E-05 (d)	1
774	Crossover Belt (North)	Fug	Outside	17	Fluorides	1,000	8,760	2.40E-04	lb/ton	7,957	1,752,000	tons/yr	--		9.55E-04	--	6
774	Crossover Belt (North)	Fug	Outside	27	Nickel	1,000	8,760	6.80E-07	lb/ton	7,957	1,752,000	tons/yr	1.36E-04	(b)	2.71E-06	6.80E-05 (d)	3
774	Crossover Belt (North)	Fug	Outside	30	PM	1,000	8,760	2.00E-02	lb/ton	7,957	1,752,000	tons/yr	--		7.96E-02	--	9
774	Crossover Belt (North)	Fug	Outside	31	PM10	1,000	8,760	3.00E-03	lb/ton	7,957	1,752,000	tons/yr	--		1.19E-02	--	8
775	North TSP Bulking (North)	Fug	Outside	9	Cadmium	1,000	8,760	6.60E-07	lb/ton	7,957	1,752,000	tons/yr	1.32E-04	(b)	2.63E-06	6.60E-05 (d)	1
775	North TSP Bulking (North)	Fug	Outside	17	Fluorides	1,000	8,760	2.40E-04	lb/ton	7,957	1,752,000	tons/yr	--		9.55E-04	--	6
775	North TSP Bulking (North)	Fug	Outside	27	Nickel	1,000	8,760	6.80E-07	lb/ton	7,957	1,752,000	tons/yr	1.36E-04	(b)	2.71E-06	6.80E-05 (d)	3
775	North TSP Bulking (North)	Fug	Outside	30	PM	1,000	8,760	2.00E-02	lb/ton	7,957	1,752,000	tons/yr	--		7.96E-02	--	9
775	North TSP Bulking (North)	Fug	Outside	31	PM10	1,000	8,760	3.00E-03	lb/ton	7,957	1,752,000	tons/yr	--		1.19E-02	--	8
*																	

Emissions Inventory Group ID: 25.0
Emissions Inventory Group Name: Granulation #3 Storage and Loadout Fugitives
Tier 1 Permit Group ID: 7.0

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)
(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0033% Cd in PM based on historical Simplot data. Emission Factor = 0.000033 x EF for PM. Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South).
2 Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). Fluorides = 1.20% PM based on historical Simplot data. Emission Factor = 0.012 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.
3 Assumes 0.0034% Ni in PM based on historical Simplot data. Emission Factor = 0.000034 x EF for PM. Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South).
4 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). Building particulate control efficiency of 90% for particulate emissions, Emission Eactor Adjustment = 0.1. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.
5 Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). PM10 = 15% PM based on historical Simplot data. Emission Factor = 0.15 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.
6 Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). Fluorides = 1.20% PM based on historical Simplot data. Emission Factor = 0.012 x EF for PM. Source #750 Maximum emissions include this source.
7 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). Building particulate control efficiency of 90% for particulate emissions, Emission Eactor Adjustment = 0.1. Source #750 Maximum emissions include this source.
8 Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). PM10 = 15% PM based on historical Simplot data. Emission Factor = 0.15 x EF for PM. Source #750 Maximum emissions include this source.
9 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Maximum yearly throughput = Tier I permit throughput limit (50% North, 50% South). Source #750 Maximum emissions include this source.

Emissions Inventory Group ID: 26.0
Emissions Inventory Group Name: Ammonium Sulfate Dryer Stack
Tier 1 Permit Group ID: 2.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
500	Dryer	Pt	Dryer Stack	1	2-Methylnaphthalene	7,800	8,760	2.40E-05	lb/MMscf	6.2	25.3	MMscf/yr	6.92E-08	(b)	7.41E-08	2.70E-07 (d)	1
500	Dryer	Pt	Dryer Stack	5	Arsenic	7,800	8,760	2.00E-04	lb/MMscf	6.2	25.3	MMscf/yr	5.77E-07	(b)	6.18E-07	2.25E-06 (d)	2
500	Dryer	Pt	Dryer Stack	6	Benzene	7,800	8,760	2.10E-03	lb/MMscf	6.2	25.3	MMscf/yr	6.06E-06	(b)	6.49E-06	2.36E-05 (d)	1
500	Dryer	Pt	Dryer Stack	9	Cadmium	7,800	8,760	1.47E-06	lb/hr	7,800	8,760	hrs/yr	1.91E-06	(b)	5.74E-06	7.47E-06 (d)	3
500	Dryer	Pt	Dryer Stack	10	Chromium	7,800	8,760	1.40E-03	lb/MMscf	6.2	25.3	MMscf/yr	4.04E-06	(b)	4.32E-06	1.58E-05 (d)	2
500	Dryer	Pt	Dryer Stack	12	CO	7,800	8,760	84.0	lb/MMscf	6.2	25.3	MMscf/yr	0.07		0.26	0.30	4
500	Dryer	Pt	Dryer Stack	13	Cobalt	7,800	8,760	8.40E-05	lb/MMscf	6.2	25.3	MMscf/yr	2.42E-07	(b)	2.59E-07	9.45E-07 (d)	2
500	Dryer	Pt	Dryer Stack	14	Dichlorobenzene	7,800	8,760	1.20E-03	lb/MMscf	6.2	25.3	MMscf/yr	3.46E-06	(b)	3.71E-06	1.35E-05 (d)	1
500	Dryer	Pt	Dryer Stack	15	Fluoranthene	7,800	8,760	3.00E-06	lb/MMscf	6.2	25.3	MMscf/yr	8.65E-09	(b)	9.27E-09	3.38E-08 (d)	1
500	Dryer	Pt	Dryer Stack	16	Fluorene	7,800	8,760	2.80E-06	lb/MMscf	6.2	25.3	MMscf/yr	8.08E-09	(b)	8.65E-09	3.15E-08 (d)	1
500	Dryer	Pt	Dryer Stack	18	Formaldehyde	7,800	8,760	7.50E-02	lb/MMscf	6.2	25.3	MMscf/yr	2.16E-04	(b)	2.32E-04	8.44E-04 (d)	1
500	Dryer	Pt	Dryer Stack	21	Hexane	7,800	8,760	1.80E+00	lb/MMscf	6.2	25.3	MMscf/yr	5.19E-03	(b)	5.56E-03	2.03E-02 (d)	1
500	Dryer	Pt	Dryer Stack	22	Lead	7,800	8,760	5.00E-04	lb/MMscf	6.2	25.3	MMscf/yr	1.44E-06	(b)	1.54E-06	5.63E-06 (d)	5
500	Dryer	Pt	Dryer Stack	23	Manganese	7,800	8,760	3.80E-04	lb/MMscf	6.2	25.3	MMscf/yr	1.10E-06	(b)	1.17E-06	4.28E-06 (d)	2
500	Dryer	Pt	Dryer Stack	24	Mercury	7,800	8,760	2.60E-04	lb/MMscf	6.2	25.3	MMscf/yr	7.50E-07	(b)	8.03E-07	2.93E-06 (d)	2
500	Dryer	Pt	Dryer Stack	25	Naphthalene	7,800	8,760	6.10E-04	lb/MMscf	6.2	25.3	MMscf/yr	1.76E-06	(b)	1.88E-06	6.86E-06 (d)	1
500	Dryer	Pt	Dryer Stack	26	NH3	7,800	8,760	8.25	lb/hr	7,800	8,760	hrs/yr	10.73	(b)	32.18	41.83 (d)	6
500	Dryer	Pt	Dryer Stack	27	Nickel	7,800	8,760	2.10E-03	lb/MMscf	6.2	25.3	MMscf/yr	6.06E-06	(b)	6.49E-06	2.36E-05 (d)	2
500	Dryer	Pt	Dryer Stack	28	NOx	7,800	8,760	100.0	lb/MMscf	6.2	25.3	MMscf/yr	0.25		0.31	1.10	4
500	Dryer	Pt	Dryer Stack	29	Phenanthrene	7,800	8,760	1.70E-05	lb/MMscf	6.2	25.3	MMscf/yr	4.90E-08	(b)	5.25E-08	1.91E-07 (d)	1
500	Dryer	Pt	Dryer Stack	30	PM	7,800	8,760	4.9E-01	lb/hr	7,800	8,760	hrs/yr	2.44		1.91	10.68	7
500	Dryer	Pt	Dryer Stack	31	PM10	7,800	8,760	4.03E-01	lb/hr	7,800	8,760	hrs/yr	2.00		1.57	8.76	8
500	Dryer	Pt	Dryer Stack	32	Pyrene	7,800	8,760	5.00E-06	lb/MMscf	6.2	25.3	MMscf/yr	1.44E-08	(b)	1.54E-08	5.63E-08 (d)	1
500	Dryer	Pt	Dryer Stack	34	SO2	7,800	8,760	3.00E-01	lb/MMscf	6.2	25.3	MMscf/yr	7.00E-04		9.27E-04	3.00E-03	9
500	Dryer	Pt	Dryer Stack	35	Toluene	7,800	8,760	3.40E-03	lb/MMscf	6.2	25.3	MMscf/yr	9.81E-06	(b)	1.05E-05	3.83E-05 (d)	1
500	Dryer	Pt	Dryer Stack	36	VOC	7,800	8,760	5.50	lb/MMscf	6.2	25.3	MMscf/yr	1.59E-02	(b)	1.70E-02	6.19E-02 (d)	5
*																	

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

Emissions Inventory Group ID: 26.0
Emissions Inventory Group Name: Ammonium Sulfate Dryer Stack
Tier 1 Permit Group ID: 2.0

References:

1 AP-42, 5th ed., Table 1.4-3 (July 1998).
2 AP-42, 5th ed., Table 1.4-4 (July 1998).
3 Assumes 0.0003% Cd in PM based on historical Simplot data. Emission Factor = 0.000003 x EF for PM.
4 AP-42, 5th ed., Table 1.4-1 for small uncontrolled natural gas combustion device (July 1998). Maximum fuel use based on rated capacity of 3 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions from Tier I permit No. T1-040313 for all Ammonium Sulfate Plant Stacks.
5 AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 3 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
6 Emission factor from source test in 1994.
7 Emission Factor from source tests on 2/06, 8/05, and 2/05. Maximum emissions from Tier I permit No. T1-040313 for all Ammonium Sulfate Plant Stacks.
8 Maximum emissions from Tier I permit No. T1-040313 for al lAmmonium Sulfate Plant Stacks; PM10 = 82% PM based on historical Simplot data. Emission Factor = 0.82 x EF for PM.
9 AP-42, 5th ed., Table 1.4-2 for natural gas combusion devices (July 1998). Scrubber efficiency of 50% based on engineering judgement. Emission Factor Adjustment = 0.5. Maximum fuel use based on rated capacity of 3 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Maximum emissions from Tier I permit No. T1-040313 for all Ammonium Sulfate Plant Stacks.

Emissions Inventory Group ID: 27.0
Emissions Inventory Group Name: Ammonium Sulfate Cooler Stack
Tier 1 Permit Group ID: 2.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
501	Cooler	Pt	Cooler Stack	9	Cadmium	7,800	8,760	1.20E-05	lb/hr	7,800	8,760	hrs/yr	1.56E-05	4.69E-05	6.09E-05	1
501	Cooler	Pt	Cooler Stack	26	NH3	7,800	8,760	--		--	--		--	--	--	2
501	Cooler	Pt	Cooler Stack	30	PM	7,800	8,760	0.71	lb/hr	7,800	8,760	hrs/yr	--	2.8	--	3
501	Cooler	Pt	Cooler Stack	31	PM10	7,800	8,760	0.58	lb/hr	7,800	8,760	hrs/yr	--	2.3	--	4
504.1	Cooler Elevator	Pt	Cooler Stack	9	Cadmium	7,800	8,760	--		--	--		--	--	--	5
504.1	Cooler Elevator	Pt	Cooler Stack	30	PM	7,800	8,760	--		--	--		--	--	--	6
504.1	Cooler Elevator	Pt	Cooler Stack	31	PM10	7,800	8,760	--		--	--		--	--	--	6
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0017% Cd in PM based on historical Simplot data. Emission Factor = 0.000017 x EF for PM.
2 Source #500 includes Actual and Maximum emissions from this source.
3 Emission Factor from source tests on 2/06, 8/05, 2/05. Source #500 includes Maximum emissions for this source.
4 Source #500 includes Maximum emissions for this source. PM10 = 82% PM based on historical Simplot data. Emission Factor = 0.82 x EF for PM.
5 Source # 501 includes Actual and Maximum emissions for this source.
6 Source #500 includes Maximum emissions and source #501 includes Actual emissions for this source.

Emissions Inventory Group ID: 28.0
Emissions Inventory Group Name: Ammonium Sulfate Process Fugitives
Tier 1 Permit Group ID: 2.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
502	Rotex Screener	Fug	Outside Vent	9	Cadmium	7,800	8,760	6.00E-08	lb/ton	47,198	73,000	tons/yr	5.00E-07	1.42E-06	1.95E-06	1
502	Rotex Screener	Fug	Outside Vent	30	PM	7,800	8,760	2.00E-02	lb/ton	47,198	73,000	tons/yr	1.67E-01	0.472	6.50E-01	2
502	Rotex Screener	Fug	Outside Vent	31	PM10	7,800	8,760	3.00E-03	lb/ton	47,198	73,000	tons/yr	2.50E-02	0.071	9.75E-02	3
505	Product Elevator	Fug	Inside	9	Cadmium	7,800	8,760	6.00E-09	lb/ton	47,198	71,825	tons/yr	4.92E-08	1.42E-07	1.92E-07	1
505	Product Elevator	Fug	Inside	30	PM	7,800	8,760	2.00E-03	lb/ton	47,198	71,825	tons/yr	1.64E-02	4.72E-02	6.40E-02	4
505	Product Elevator	Fug	Inside	31	PM10	7,800	8,760	3.00E-04	lb/ton	47,198	71,825	tons/yr	2.46E-03	7.08E-03	9.59E-03	3
506	Fines Tank	Fug	Inside	30	PM	7,800	8,760	2.00E-02	lb/ton	4,493	6,825	tons/yr	1.56E-02	4.49E-02	6.08E-02	2
506	Fines Tank	Fug	Inside	31	PM10	7,800	8,760	3.00E-03	lb/ton	4,493	6,825	tons/yr	2.34E-03	6.74E-03	9.12E-03	3
511	Centrifuge	Pt	Inside Vent	9	Cadmium	7,800	8,760	6.00E-09	lb/ton	47,198	71,825	tons/yr	4.92E-08	1.42E-07	1.92E-07	1
511	Centrifuge	Pt	Inside Vent	30	PM	7,800	8,760	2.00E-03	lb/ton	47,198	71,825	tons/yr	1.64E-02	4.72E-02	6.40E-02	4
511	Centrifuge	Pt	Inside Vent	31	PM10	7,800	8,760	3.00E-04	lb/ton	47,198	71,825	tons/yr	2.46E-03	7.08E-03	9.59E-03	3
512	Fines Conveyer Belt	Fug	Inside	9	Cadmium	7,800	8,760	6.00E-09	lb/ton	78,000	87,600	tons/yr	7.80E-08	2.34E-07	3.04E-07	1
512	Fines Conveyer Belt	Fug	Inside	30	PM	7,800	8,760	2.00E-03	lb/ton	78,000	87,600	tons/yr	2.60E-02	0.078	1.01E-01	4
512	Fines Conveyer Belt	Fug	Inside	31	PM10	7,800	8,760	3.00E-04	lb/ton	78,000	87,600	tons/yr	3.90E-03	0.012	1.52E-02	3
513	Conveyer to Storage Dome	Fug	Inside/Outside	9	Cadmium	7,800	8,760	3.00E-08	lb/ton	37,976	57,850	tons/yr	1.98E-07	5.70E-07	7.73E-07	1
513	Conveyer to Storage Dome	Fug	Inside/Outside	30	PM	7,800	8,760	1.00E-02	lb/ton	37,976	57,850	tons/yr	6.60E-02	0.190	2.58E-01	5
513	Conveyer to Storage Dome	Fug	Inside/Outside	31	PM10	7,800	8,760	1.50E-03	lb/ton	37,976	57,850	tons/yr	9.91E-03	0.028	3.86E-02	3
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0003% Cd in PM based on historical Simplot data. Emission Factor = 0.000003 x EF for PM.

2 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993).

3 PM10 = 15% of PM based on historical Simplot data. Emission Factor = 0.15 x EF for PM.

4 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90% for particulates, Emission Factor Adjustment = 0.1.

5 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 80% for particulates, Emission Factor Adjustment = 0.5.

Emissions Inventory Group ID: 29.0
Emissions Inventory Group Name: Ammonium Sulfate Storage and Loadout Fugitives
Tier 1 Permit Group ID: 2.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor	Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum		Actual	Maximum	Units		Actual [c]	Maximum	
*															
550	Storage Dome Drop	Fug	Inside/Roof Vent	9	Cadmium	7,800	8,760	6.00E-09 lb/ton	37,976	73,000	tons/yr	5.00E-08 (b)	1.14E-07	1.95E-07 (d)	1
550	Storage Dome Drop	Fug	Inside/Roof Vent	30	PM	7,800	8,760	2.00E-03 lb/ton	37,976	73,000	tons/yr	2.52	3.80E-02	11.04	2
550	Storage Dome Drop	Fug	Inside/Roof Vent	31	PM10	7,800	8,760	3.00E-04 lb/ton	37,976	73,000	tons/yr	0.90	5.70E-03	3.92	3
551	Front End Loader Operations	Fug	Inside/Roof Vent	9	Cadmium	1,000	8,760	6.00E-09 lb/ton	42,839	73,000	tons/yr	5.69E-07	1.29E-07	1.13E-06	1
551	Front End Loader Operations	Fug	Inside/Roof Vent	30	PM	1,000	8,760	2.00E-03 lb/ton	42,839	73,000	tons/yr	--	4.28E-02	--	4
551	Front End Loader Operations	Fug	Inside/Roof Vent	31	PM10	1,000	8,760	3.00E-04 lb/ton	42,839	73,000	tons/yr	--	6.43E-03	--	5
551.1	Screen	Fug	Inside	9	Cadmium	1,000	8,760	6.00E-09 lb/ton	42,839	73,000	tons/yr	5.69E-07	1.29E-07	1.13E-06	1
551.1	Screen	Fug	Inside	30	PM	1,000	8,760	2.00E-03 lb/ton	42,839	73,000	tons/yr	--	4.28E-02	--	4
551.1	Screen	Fug	Inside	31	PM10	1,000	8,760	3.00E-04 lb/ton	42,839	73,000	tons/yr	--	6.43E-03	--	5
552	Product Elevator	Fug	Inside/Roof Vent	9	Cadmium	1,000	8,760	6.00E-09 lb/ton	42,839	73,000	tons/yr	5.69E-07	1.29E-07	1.13E-06	1
552	Product Elevator	Fug	Inside/Roof Vent	30	PM	1,000	8,760	2.00E-03 lb/ton	42,839	73,000	tons/yr	--	4.28E-02	--	4
552	Product Elevator	Fug	Inside/Roof Vent	31	PM10	1,000	8,760	3.00E-04 lb/ton	42,839	73,000	tons/yr	--	6.43E-03	--	5
553	Crossover Belt	Fug	Outside/Covered	9	Cadmium	1,000	8,760	3.00E-08 lb/ton	42,839	73,000	tons/yr	2.85E-06	6.43E-07	5.63E-06	1
553	Crossover Belt	Fug	Outside/Covered	30	PM	1,000	8,760	1.00E-02 lb/ton	42,839	73,000	tons/yr	--	2.14E-01	--	6
553	Crossover Belt	Fug	Outside/Covered	31	PM10	1,000	8,760	1.50E-03 lb/ton	42,839	73,000	tons/yr	--	3.21E-02	--	5
554	Product Loadout	Fug	Outside/Covered	9	Cadmium	1,000	8,760	3.00E-08 lb/ton	42,839	73,000	tons/yr	2.85E-06	6.43E-07	5.63E-06	1
554	Product Loadout	Fug	Outside/Covered	30	PM	1,000	8,760	1.00E-02 lb/ton	42,839	73,000	tons/yr	--	2.14E-01	--	6
554	Product Loadout	Fug	Outside/Covered	31	PM10	1,000	8,760	1.50E-03 lb/ton	42,839	73,000	tons/yr	--	3.21E-02	--	5
*															

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes 0.0003% Cd in PM based on historical Simplot data. Emission Factor = 0.000003 x EF for PM.

2 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90% for particulate emissions, Emission Factor Adjustment = 0.1. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

3 PM10 = 15%PM based on historical Simplot data. Emission Factor = 0.15 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for fugitive emissions.

4 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 90% for particulate emissions, Emission Factor Adjustment = 0.1. Source #550 Maximum emissions include this source.

5 PM10 = 15%PM based on historical Simplot data. Emission Factor = 0.15 x EF for PM. Source #550 Maximum emissions include this source.

6 AP-42, 5th ed., Table 8.3-2 for uncontrolled bulk loading operations (July 1993). Building particulate control efficiency = 50% for particulate emissions, Emission Factor Adjustment = 0.5. Source #550 Maximum emissions include this source.

Emissions Inventory Group ID: 33.0
Emissions Inventory Group Name: Water Reclaim System Cooling Towers
Tier 1 Permit Group ID: 12.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [b]	Maximum	
*																
908	North Cooling Towers - 2 cells	Pt	Fan Exhuast	17	Fluorides	8,136	8,760	5.1	lb/hr	8,136	8,760	hrs/yr	9.8	20.7	43.4	1
908	North Cooling Towers - 2 cells	Pt	Fan Exhuast	30	PM	8,136	8,760	26.5	lb/hr	8,136	8,760	hrs/yr	35.3	107.7	155	1
908	North Cooling Towers - 2 cells	Pt	Fan Exhuast	31	PM10	8,136	8,760	5.3	lb/hr	8,136	8,760	hrs/yr	7.1	21.5	30.9	2
909	West Cooling Towers - 3 cells	Pt	Fan Exhuast	17	Fluorides	8,136	8,760	7.6	lb/hr	8,136	8,760	hrs/yr	14.7	31.0	65.1	1
909	West Cooling Towers - 3 cells	Pt	Fan Exhuast	30	PM	8,136	8,760	39.7	lb/hr	8,136	8,760	hrs/yr	53.0	161.6	232	1
909	West Cooling Towers - 3 cells	Pt	Fan Exhuast	31	PM10	8,136	8,760	7.9	lb/hr	8,136	8,760	hrs/yr	10.6	32.3	46.4	2
910	East Cooling Towers - 3 cells	Pt	Fan Exhuast	17	Fluorides	8,136	8,760	7.6	lb/hr	8,136	8,760	hrs/yr	14.7	31.0	65.1	1
910	East Cooling Towers - 3 cells	Pt	Fan Exhuast	30	PM	8,136	8,760	39.7	lb/hr	8,136	8,760	hrs/yr	53.0	161.6	232	1
910	East Cooling Towers - 3 cells	Pt	Fan Exhuast	31	PM10	8,136	8,760	7.9	lb/hr	8,136	8,760	hrs/yr	10.6	32.3	46.4	2
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

References:

1 Emission Factors from source tests on 5/2/06, 5/1/06, and 4/28/06. Maximum emissions from Tier I permit No. T1-040313 for Reclaim Cooling Tower Cells.

2 Assumes 20% PM10 in PM based on historical Simplot data. Emission Factor = 0.2 x EF for PM. Maximum emissions from Tier I permit No. T1-040313 for Reclaim Cooling Tower Cells.

Emissions Inventory Group ID: 34.0
Emissions Inventory Group Name: Water Reclaim System Fugitives
Tier 1 Permit Group ID: Subset of group 12

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
218	#1 Hot Pit	Fug	Outside	17	Fluorides	7,896	8,760	3.80E-02	lb/day	329	365	days/yr	2.06E-03	6.25E-03	8.12E-03	1
220	Hot Pit / Cooling Tower Overflow	Fug	Pool Surface	17	Fluorides	7,896	8,760	6.17E-02	lb/day	329	365	days/yr	3.34E-03	1.02E-02	1.32E-02	1
221	Gypsum Thickners	Fug	Outside	17	Fluorides	7,896	8,760	3.25E-01	lb/day	329	365	days/yr	1.76E-02	5.34E-02	6.94E-02	1
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Emission factor of 1.6 lb/acre-day was used (site specific factor). #1 Hot Pit is 47' x 22', Hot Pit/Cooling Tower Overflow is 40' x 42', and Gypsum Thickners are 4,418 square feet.

Emissions Inventory Group ID: 36.0
Emissions Inventory Group Name: Babcock & Wilcox Boiler
Tier 1 Permit Group ID: 4.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor	Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum		Actual	Maximum	Units		Actual [c]	Maximum	
*															
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	1	2-Methylnaphthalene	8,760	8,760	2.40E-05 lb/MMscf	86.97	558.9	MMscf/yr	1.53E-06 (b)	1.04E-06	6.71E-06 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	5	Arsenic	8,760	8,760	2.00E-04 lb/MMscf	86.97	558.9	MMscf/yr	1.28E-05 (b)	8.70E-06	5.59E-05 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	6	Benzene	8,760	8,760	2.10E-03 lb/MMscf	86.97	558.9	MMscf/yr	1.34E-04 (b)	9.13E-05	5.87E-04 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	9	Cadmium	8,760	8,760	1.10E-03 lb/MMscf	86.97	558.9	MMscf/yr	7.02E-05 (b)	4.78E-05	3.07E-04 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	10	Chromium	8,760	8,760	1.40E-03 lb/MMscf	86.97	558.9	MMscf/yr	8.93E-05 (b)	6.09E-05	3.91E-04 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	12	CO	8,760	8,760	84.0 lb/MMscf	86.97	558.9	MMscf/yr	11.7	3.65	51.1	3
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	13	Cobalt	8,760	8,760	8.40E-05 lb/MMscf	86.97	558.9	MMscf/yr	5.36E-06 (b)	3.65E-06	2.35E-05 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	14	Dichlorobenzene	8,760	8,760	1.20E-03 lb/MMscf	86.97	558.9	MMscf/yr	7.66E-05 (b)	5.22E-05	3.35E-04 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	15	Fluoranthene	8,760	8,760	3.00E-06 lb/MMscf	86.97	558.9	MMscf/yr	1.91E-07 (b)	1.30E-07	8.38E-07 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	16	Fluorene	8,760	8,760	2.80E-06 lb/MMscf	86.97	558.9	MMscf/yr	1.79E-07 (b)	1.22E-07	7.82E-07 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	18	Formaldehyde	8,760	8,760	7.50E-02 lb/MMscf	86.97	558.9	MMscf/yr	4.79E-03 (b)	3.26E-03	2.10E-02 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	21	Hexane	8,760	8,760	1.80 lb/MMscf	86.97	558.9	MMscf/yr	1.15E-01 (b)	7.83E-02	5.03E-01 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	22	Lead	8,760	8,760	5.00E-04 lb/MMscf	86.97	558.9	MMscf/yr	3.19E-05 (b)	2.17E-05	1.40E-04 (d)	4
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	23	Manganese	8,760	8,760	3.80E-04 lb/MMscf	86.97	558.9	MMscf/yr	2.42E-05 (b)	1.65E-05	1.06E-04 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	24	Mercury	8,760	8,760	2.60E-04 lb/MMscf	86.97	558.9	MMscf/yr	1.66E-05 (b)	1.13E-05	7.27E-05 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	25	Naphthalene	8,760	8,760	6.10E-04 lb/MMscf	86.97	558.9	MMscf/yr	3.89E-05 (b)	2.65E-05	1.70E-04 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	27	Nickel	8,760	8,760	2.10E-03 lb/MMscf	86.97	558.9	MMscf/yr	1.34E-04 (b)	9.13E-05	5.87E-04 (d)	2
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	28	NOx	8,760	8,760	50.0 lb/MMscf	86.97	558.9	MMscf/yr	2.88	2.17	12.6	3
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	29	Phenanthrene	8,760	8,760	1.70E-05 lb/MMscf	86.97	558.9	MMscf/yr	1.08E-06 (b)	7.39E-07	4.75E-06 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	30	PM	8,760	8,760	7.60 lb/MMscf	86.97	558.9	MMscf/yr	0.64	0.33	2.79	6
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	31	PM10	8,760	8,760	7.60 lb/MMscf	86.97	558.9	MMscf/yr	0.32	0.33	1.40	5
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	32	Pyrene	8,760	8,760	5.00E-06 lb/MMscf	86.97	558.9	MMscf/yr	3.19E-07 (b)	2.17E-07	1.40E-06 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	34	SO2	8,760	8,760	0.60 lb/MMscf	86.97	558.9	MMscf/yr	4.00E-02	2.61E-02	1.70E-01	6
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	35	Toluene	8,760	8,760	3.40E-03 lb/MMscf	86.97	558.9	MMscf/yr	2.17E-04 (b)	1.48E-04	9.50E-04 (d)	1
1002	Babcock & Wilcox Boiler (BW1)	Pt.	BW1 Main Stack	36	VOC	8,760	8,760	5.50 lb/MMscf	86.97	558.9	MMscf/yr	0.19	0.24	0.84	6
*															

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 AP-42, 5th ed., Table 1.4-3 (July 1998). Maximum fuel use based on rated capacity of 63.8 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
2 AP-42, 5th ed., Table 1.4-4 (July 1998). Maximum fuel use based on rated capacity of 63.8 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
3 AP-42, 5th ed., Table 1.4-1 (July 1998). Maximum fuel use based on rated capacity of 63.8 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
4 AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 63.8 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.
5 Assumes 100% of PM is PM10. Maximum emissions from Tier I permit No. T1-040313.
6 Maximum emissions from Tier I permit No. T1-040313. AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 63.8 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf.

Emissions Inventory Group ID: 37.0
Emissions Inventory Group Name: Miscellaneous Generators
Tier 1 Permit Group ID:

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	2	Acetaldehyde	4	10	7.67E-04	lb/MMBtu	307	307	MMBtu/yr	7.66E-02	1.18E-04	2.95E-04	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	3	Anthracene	4	10	1.87E-06	lb/MMBtu	307	307	MMBtu/yr	1.87E-04	2.87E-07	7.19E-07	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	6	Benzene	4	10	9.33E-04	lb/MMBtu	307	307	MMBtu/yr	9.32E-02	1.43E-04	3.59E-04	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	7	Benzo(a)anthracene	4	10	1.68E-06	lb/MMBtu	307	307	MMBtu/yr	1.68E-04	2.58E-07	6.46E-07	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	11	Chrysene	4	10	3.53E-07	lb/MMBtu	307	307	MMBtu/yr	3.53E-05	5.43E-08	1.36E-07	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	12	CO	4	10	9.50E-01	lb/MMBtu	307	307	MMBtu/yr	9.49E+01	1.46E-01	3.65E-01	2
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	15	Fluoranthene	4	10	7.61E-06	lb/MMBtu	307	307	MMBtu/yr	7.60E-04	1.17E-06	2.92E-06	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	16	Fluorene	4	10	2.92E-05	lb/MMBtu	307	307	MMBtu/yr	2.92E-03	4.49E-06	1.12E-05	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	18	Formaldehyde	4	10	1.18E-03	lb/MMBtu	307	307	MMBtu/yr	1.18E-01	1.81E-04	4.53E-04	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	25	Naphthalene	4	10	8.48E-05	lb/MMBtu	307	307	MMBtu/yr	8.47E-03	1.30E-05	3.26E-05	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	28	NOx	4	10	4.41E+00	lb/MMBtu	307	307	MMBtu/yr	4.41E+02	6.78E-01	1.69E+00	2
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	29	Phenanthrene	4	10	2.94E-05	lb/MMBtu	307	307	MMBtu/yr	2.94E-03	4.52E-06	1.13E-05	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	30	PM	4	10	3.10E-01	lb/MMBtu	307	307	MMBtu/yr	3.10E+01	4.76E-02	1.19E-01	3
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	31	PM10	4	10	3.10E-01	lb/MMBtu	307	307	MMBtu/yr	3.10E+01	4.76E-02	1.19E-01	2
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	32	Pyrene	4	10	4.78E-06	lb/MMBtu	307	307	MMBtu/yr	4.78E-04	7.35E-07	1.84E-06	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	34	SO2	4	10	2.90E-01	lb/MMBtu	307	307	MMBtu/yr	2.90E+01	4.46E-02	1.11E-01	2
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	35	Toluene	4	10	4.09E-04	lb/MMBtu	307	307	MMBtu/yr	4.09E-02	6.29E-05	1.57E-04	1
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	36	VOC	4	10	3.60E-01	lb/MMBtu	307	307	MMBtu/yr	3.60E+01	5.53E-02	1.38E-01	2
1003	Standby Diesel Generator (400 KW)	Pt.	S. Wall Blr. Bldg.	37	Xylenes	4	10	2.85E-04	lb/MMBtu	307	307	MMBtu/yr	2.85E-02	4.38E-05	1.10E-04	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	2	Acetaldehyde	291	500	7.67E-04	lb/MMBtu	2,450	2,450	MMBtu/yr	8.39E-03	9.40E-04	1.61E-03	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	3	Anthracene	291	500	1.87E-06	lb/MMBtu	2,450	2,450	MMBtu/yr	2.05E-05	2.29E-06	3.94E-06	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	6	Benzene	291	500	9.33E-04	lb/MMBtu	2,450	2,450	MMBtu/yr	1.02E-02	1.14E-03	1.96E-03	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	7	Benzo(a)anthracene	291	500	1.68E-06	lb/MMBtu	2,450	2,450	MMBtu/yr	1.84E-05	2.06E-06	3.54E-06	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	11	Chrysene	291	500	3.53E-07	lb/MMBtu	2,450	2,450	MMBtu/yr	3.86E-06	4.32E-07	7.43E-07	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	12	CO	291	500	9.50E-01	lb/MMBtu	2,450	2,450	MMBtu/yr	1.04E+01	1.16E+00	2.00E+00	2
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	15	Fluoranthene	291	500	7.61E-06	lb/MMBtu	2,450	2,450	MMBtu/yr	8.33E-05	9.32E-06	1.60E-05	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	16	Fluorene	291	500	2.92E-05	lb/MMBtu	2,450	2,450	MMBtu/yr	3.20E-04	3.58E-05	6.15E-05	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	18	Formaldehyde	291	500	1.18E-03	lb/MMBtu	2,450	2,450	MMBtu/yr	1.29E-02	1.45E-03	2.48E-03	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	25	Naphthalene	291	500	8.48E-05	lb/MMBtu	2,450	2,450	MMBtu/yr	9.28E-04	1.04E-04	1.78E-04	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	28	NOx	291	500	4.41E+00	lb/MMBtu	2,450	2,450	MMBtu/yr	4.83E+01	5.40E+00	9.28E+00	2
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	29	Phenanthrene	291	500	2.94E-05	lb/MMBtu	2,450	2,450	MMBtu/yr	3.22E-04	3.60E-05	6.19E-05	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	30	PM	291	500	3.10E-01	lb/MMBtu	2,450	2,450	MMBtu/yr	3.39E+00	3.80E-01	6.52E-01	3
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	31	PM10	291	500	3.10E-01	lb/MMBtu	2,450	2,450	MMBtu/yr	3.39E+00	3.80E-01	6.52E-01	2
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	32	Pyrene	291	500	4.78E-06	lb/MMBtu	2,450	2,450	MMBtu/yr	5.23E-05	5.86E-06	1.01E-05	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	34	SO2	291	500	2.90E-01	lb/MMBtu	2,450	2,450	MMBtu/yr	3.17E+00	3.55E-01	6.10E-01	2
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	35	Toluene	291	500	4.09E-04	lb/MMBtu	2,450	2,450	MMBtu/yr	4.48E-03	5.01E-04	8.61E-04	1
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	36	VOC	291	500	3.60E-01	lb/MMBtu	2,450	2,450	MMBtu/yr	3.94E+00	4.41E-01	7.58E-01	2
1216.1	Backup Diesel Generator (350 KW)	Pt	Roof Vent	37	Xylenes	291	500	2.85E-04	lb/MMBtu	2,450	2,450	MMBtu/yr	3.12E-03	3.49E-04	6.00E-04	1
*																

Emissions Inventory Group ID: 37.0
Emissions Inventory Group Name: Miscellaneous Generators
Tier 1 Permit Group ID:

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)
(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 AP-42, 5th ed., Table 3.3-2 for uncontrolled diesel industrial engines (October, 1996).
2 AP-42, 5th ed., Table 3.3-1 for uncontrolled diesel industrial engines (October, 1996).
3 It was assumed that 100% of PM is PM10.

Emissions Inventory Group ID: 38.0
Emissions Inventory Group Name: HPB&W Boiler
Tier 1 Permit Group ID: 3.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)			Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum		
*																		
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	1	2-Methylnaphthalene	1,752	8,760	2.40E-05	lb/MMscf	306.6	1533	MMscf/yr	5.46E-06	(b)	3.68E-06	1.84E-05	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	5	Arsenic	1,752	8,760	2.00E-04	lb/MMscf	306.6	1533	MMscf/yr	4.55E-05	(b)	3.07E-05	1.53E-04	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	6	Benzene	1,752	8,760	2.10E-03	lb/MMscf	306.6	1533	MMscf/yr	4.78E-04	(b)	3.22E-04	1.61E-03	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	9	Cadmium	1,752	8,760	1.10E-03	lb/MMscf	306.6	1533	MMscf/yr	2.50E-04	(b)	1.69E-04	8.43E-04	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	10	Chromium	1,752	8,760	1.40E-03	lb/MMscf	306.6	1533	MMscf/yr	3.19E-04	(b)	2.15E-04	1.07E-03	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	12	CO	1,752	8,760	80.0	lb/MMscf	306.6	1533	MMscf/yr	14.0		12.26	61.3		7
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	13	Cobalt	1,752	8,760	8.40E-05	lb/MMscf	306.6	1533	MMscf/yr	1.91E-05	(b)	1.29E-05	6.44E-05	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	14	Dichlorobenzene	1,752	8,760	1.20E-03	lb/MMscf	306.6	1533	MMscf/yr	2.73E-04	(b)	1.84E-04	9.20E-04	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	15	Fluoranthene	1,752	8,760	3.00E-06	lb/MMscf	306.6	1533	MMscf/yr	6.83E-07	(b)	4.60E-07	2.30E-06	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	16	Fluorene	1,752	8,760	2.80E-06	lb/MMscf	306.6	1533	MMscf/yr	6.37E-07	(b)	4.29E-07	2.15E-06	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	18	Formaldehyde	1,752	8,760	7.50E-02	lb/MMscf	306.6	1533	MMscf/yr	1.71E-02	(b)	1.15E-02	5.75E-02	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	21	Hexane	1,752	8,760	1.80	lb/MMscf	306.6	1533	MMscf/yr	4.10E-01	(b)	2.76E-01	1.38E+00	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	22	Lead	1,752	8,760	5.00E-04	lb/MMscf	306.6	1533	MMscf/yr	1.14E-04	(b)	7.67E-05	3.83E-04	(d)	4
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	23	Manganese	1,752	8,760	3.80E-04	lb/MMscf	306.6	1533	MMscf/yr	8.65E-05	(b)	5.83E-05	2.91E-04	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	24	Mercury	1,752	8,760	2.60E-04	lb/MMscf	306.6	1533	MMscf/yr	5.92E-05	(b)	3.99E-05	1.99E-04	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	25	Naphthalene	1,752	8,760	6.10E-04	lb/MMscf	306.6	1533	MMscf/yr	1.39E-04	(b)	9.35E-05	4.68E-04	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	27	Nickel	1,752	8,760	2.10E-03	lb/MMscf	306.6	1533	MMscf/yr	4.78E-04	(b)	3.22E-04	1.61E-03	(d)	2
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	28	NOx	1,752	8,760	140.0	lb/MMscf	306.6	1533	MMscf/yr	7.00		21.46	30.7		3
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	29	Phenanthrene	1,752	8,760	1.70E-05	lb/MMscf	306.6	1533	MMscf/yr	3.87E-06	(b)	2.61E-06	1.30E-05	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	30	PM	1,752	8,760	7.60	lb/MMscf	306.6	1533	MMscf/yr	1.33		1.17	5.83		6
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	31	PM10	1,752	8,760	7.60	lb/MMscf	306.6	1533	MMscf/yr	1.33		1.17	5.83		5
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	32	Pyrene	1,752	8,760	5.00E-06	lb/MMscf	306.6	1533	MMscf/yr	1.14E-06	(b)	7.67E-07	3.83E-06	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	34	SO2	1,752	8,760	0.60	lb/MMscf	306.6	1533	MMscf/yr	1.10E-01		9.20E-02	4.60E-01		6
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	35	Toluene	1,752	8,760	3.40E-03	lb/MMscf	306.6	1533	MMscf/yr	7.74E-04	(b)	5.21E-04	2.61E-03	(d)	1
1004	HPB&W Boiler (BW2)	Pt.	BW2 Main Stack	36	VOC	1,752	8,760	5.50	lb/MMscf	306.6	1533	MMscf/yr	0.96		0.84	4.22		6
*																		

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

Emissions Inventory Group ID: 38.0
Emissions Inventory Group Name: HPB&W Boiler
Tier 1 Permit Group ID: 3.0

References:

1 AP-42, 5th ed., Table 1.4-3 (July 1998). Maximum fuel use based on rated capacity of 175 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Actual hours and throughput assumed to be 20% of the maximum.
2 AP-42, 5th ed., Table 1.4-4 (July 1998). Maximum fuel use based on rated capacity of 175 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Actual hours and throughput assumed to be 20% of the maximum.
3 AP-42, 5th ed., Table 1.4-1 (July 1998). Maximum fuel use based on rated capacity of 175 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Actual hours and throughput assumed to be 20% of the maximum.
4 AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 175 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Actual hours and throughput assumed to be 20% of the maximum.
5 Assumes 100% of PM is PM10. Maximum emissions from Tier I permit No. T1-040313. Actual hours and throughput assumed to be 20% of the maximum.
6 Maximum emissions from Tier I permit No. T1-040313. AP-42, 5th ed., Table 1.4-2 (July 1998). Maximum fuel use based on rated capacity of 175 MMBtu/hr (provided by Simplot) and 1,040 BTU/scf. Actual hours and throughput assumed to be 20% of the maximum.
7 Emission factor from vender warranty.

Emissions Inventory Group ID: 40.0
Emissions Inventory Group Name: Super Phosphoric Acid Plant Scrubber Stack
Tier 1 Permit Group ID: 13.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [b]	Maximum	
*																
1102	Product Tank	Pt	Scrubber Stack	17	Fluorides	6,640	8,760	0.002	lb/hr	6,640	8,760	hrs/yr	0.37	7.81E-03	1.62	1
1104	Leaf Filters	Pt	Scrubber Stack	17	Fluorides	5,840	8,760	--		6,640	8,760	hrs/yr	--	--	--	2
1108.1	Evaporators	Pt	Scrubber Stack	17	Fluorides	6,640	8,760	--		6,640	8,760	hrs/yr	--	--	--	2
1108.2	Sump #6	Pt	Scrubber Stack	17	Fluorides	6,640	8,760	--		6,640	8,760	hrs/yr	--	--	--	2
1109	Oxidizer	Pt	Scrubber Stack	12	CO	6,640	8,760	1.8	lb/hr	6,640	8,760	hrs/yr	4.2	6.1	18.3	3
1109	Oxidizer	Pt	Scrubber Stack	17	Fluorides	6,640	8,760	0	lb/hr	6,640	8,760	hrs/yr	--	--	--	2
1109	Oxidizer	Pt	Scrubber Stack	28	NOx	6,640	8,760	0.033	lb/hr	6,640	8,760	hrs/yr	0.10	0.11	0.40	4
1112	Evaporator Feed Tank	Pt	Scrubber Stack	17	Fluorides	6,640	8,760	--		6,640	8,760	hrs/yr	--	--	--	2
1113	Effluent Tank	Pt	Scrubber Stack	17	Fluorides	6,640	8,760	--		--	--		--	--	--	2
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

References:

1 Emission factor from source tests on 7/04, 7/05, and 7/06. Maximum emissions from Tier I permit No. T1-040313 for Super Phosphoric Acid Plant and Associated Handling. Assigns fugitive permit limit through new scrubber stack. Assumes a 98% collection efficiency. Emission Factor Adjustment = 0.98.
2 Source #1102.0 includes Actual and Maximum emissions from this source.
3 Emission factor extracted from source test, 12/04. Maximum emissions from Tier I permit No. T1-040313 for the Extended Absorption Scrubber.
4 Emission factor from source test on 1/91 and 5/92. Maximum emissions from Tier I permit No. T1-040313 for the Extended Absorption Scrubber.

Emissions Inventory Group ID: 40.1
Emissions Inventory Group Name: Super Phosphoric Acid Plant Fugitives
Tier 1 Permit Group ID:

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
1102.1	Product Tank	Fug	Outside	17	Fluorides	6,640	8,760	4.80E-05	lb/hr	6,640	8,760	hrs/yr	7.40E-03		1.59E-04	0.032	1
1108.3	Evaporators	Fug	Outside	17	Fluorides	6,640	8,760	--		--	--		--		--	--	2
1108.4	Sump #6	Fug	Outside	17	Fluorides	6,640	8,760	--		--	--		--		--	--	2
1112.1	Evaporator Feed Tank	Fug	Outside	17	Fluorides	6,640	8,760	--		--	--		--		--	--	2
1113.1	Evaporator Seal Cans	Fug	Outside	17	Fluorides	6,640	8,760	--		--	--		--		--	--	2
1506	Scrubber Stack	Pt	Outside	17	Fluorides	6,640	8,760	--		--	--		--		--	--	2
1506.1	Tanks - Liquid Plant	Fug	Outside	17	Fluorides	6,640	8,760	--		--	--		--		--	--	2
1521	#7 Sump	Fug	Outside	17	Fluorides	8,760	8,760	2.35E-03	lbs/day	365	365	days/yr	1.27E-04	(b)	4.29E-04	5.58E-04 (d)	3
1522	North Effluent Sump	Fug	Outside	17	Fluorides	8,760	8,760	8.82E-04	lbs/day	365	365	days/yr	4.78E-05	(b)	1.61E-04	2.09E-04 (d)	3
1523	#4 Sump	Fug	Outside	17	Fluorides	8,760	8,760	1.10E-03	lbs/day	365	365	days/yr	5.97E-05	(b)	2.01E-04	2.61E-04 (d)	3
1524	SPA Aging Tank	Fug	Outside	17	Fluorides	8,760	8,760	4.63E-04	lbs/day	365	365	days/yr	2.51E-05	(b)	8.45E-05	1.10E-04 (d)	3
1525	#6 Sump	Fug	Outside	17	Fluorides	8,760	8,760	2.50E-03	lbs/day	365	365	days/yr	1.35E-04	(b)	4.56E-04	5.93E-04 (d)	3
*																	

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Assumes a 98% collection efficiency for new scrubber system (i.e. 2% now escapes as fugitives).

2 Source #1102.1 includes actual and maximum emissions from this source.

3 Emission factor of 1.6 lb/acre-day was used (site specific factor). #7 Sump is 8' x 8', North Effluent Sump is 6' x 4', #4 Sump is 5' x 6', SPA Aging Tank has a diameter of 4', and #6 Sump is 17' x 4'.

Emissions Inventory Group ID: 41.0
Emissions Inventory Group Name: Roads
Tier 1 Permit Group ID: 11.0

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual	Maximum [e]	
*																
1601	Paved Segment 1	Line	Fug Dust	30	PM	8,760	8,760	1.82E-03	lb/VMT	7,665		VMT/yr	1.60E-03	6.56E-03 (c)	6.56E-03	1
1601	Paved Segment 1	Line	Fug Dust	31	PM10	8,760	8,760	0.00E+00	lb/VMT	7,665		VMT/yr	0.00E+00	0.00E+00 (c)	0.00E+00	1
1602	Paved Segment 2	Line	Fug Dust	30	PM	8,760	8,760	1.82E-03	lb/VMT	4,563		VMT/yr	9.50E-04	3.90E-03 (c)	3.90E-03	
1602	Paved Segment 2	Line	Fug Dust	31	PM10	8,760	8,760	0.00E+00	lb/VMT	4,563		VMT/yr	0.00E+00	0.00E+00 (c)	0.00E+00	
1603	Paved Segment 3	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	8,067		VMT/yr	6.33E-02	2.60E-01 (c)	2.60E-01	
1603	Paved Segment 3	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	8,067		VMT/yr	1.20E-02	4.93E-02 (c)	4.93E-02	
1604	Paved Segment 4	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	7,227		VMT/yr	5.67E-02	2.33E-01 (c)	2.33E-01	
1604	Paved Segment 4	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	7,227		VMT/yr	1.08E-02	4.42E-02 (c)	4.42E-02	
1605	Paved Segment 5	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	1,424		VMT/yr	1.12E-02	4.59E-02 (c)	4.59E-02	
1605	Paved Segment 5	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	1,424		VMT/yr	2.12E-03	8.71E-03 (c)	8.71E-03	
1606	Paved Segment 6	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	1,168		VMT/yr	9.17E-03	3.77E-02 (c)	3.77E-02	
1606	Paved Segment 6	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	1,168		VMT/yr	1.74E-03	7.14E-03 (c)	7.14E-03	
1607	Paved Segment 7	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	1,643		VMT/yr	1.29E-02	5.30E-02 (c)	5.30E-02	
1607	Paved Segment 7	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	1,643		VMT/yr	2.44E-03	1.00E-02 (c)	1.00E-02	
1608	Paved Segment 8	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	329		VMT/yr	2.58E-03	1.06E-02 (c)	1.06E-02	
1608	Paved Segment 8	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	329		VMT/yr	4.89E-04	2.01E-03 (c)	2.01E-03	
1609	Paved Segment 9	Line	Fug Dust	30	PM	8,760	8,760	6.87E-02	lb/VMT	1,241		VMT/yr	9.74E-03	4.00E-02 (c)	4.00E-02	
1609	Paved Segment 9	Line	Fug Dust	31	PM10	8,760	8,760	1.30E-02	lb/VMT	1,241		VMT/yr	1.85E-03	7.59E-03 (c)	7.59E-03	
1610	Paved Segment 10	Line	Fug Dust	30	PM	8,760	8,760	1.82E-03	lb/VMT	1,898		VMT/yr	3.95E-04	1.62E-03 (c)	1.62E-03	
1610	Paved Segment 10	Line	Fug Dust	31	PM10	8,760	8,760	0.00E+00	lb/VMT	1,898		VMT/yr	0.00E+00	0.00E+00 (c)	0.00E+00	
1651	Unpaved Segment 1	Line	Fug Dust	30	PM	8,760	8,760	9.31	lb/VMT	7,008		VMT/yr	7.45	24.57 (c)	24.57	2
1651	Unpaved Segment 1	Line	Fug Dust	31	PM10	8,760	8,760	3.39	lb/VMT	7,008		VMT/yr	2.71	8.94 (c)	8.94	2
1652	Unpaved Segment 2	Line	Fug Dust	30	PM	8,760	8,760	9.31	lb/VMT	1,460		VMT/yr	1.55	5.12 (d)	5.12	
1652	Unpaved Segment 2	Line	Fug Dust	31	PM10	8,760	8,760	3.39	lb/VMT	1,460		VMT/yr	0.56	1.86 (d)	1.86	
1653	Unpaved Segment 3	Line	Fug Dust	30	PM	8,760	8,760	9.31	lb/VMT	2,774		VMT/yr	2.95	9.73 (d)	9.73	
1653	Unpaved Segment 3	Line	Fug Dust	31	PM10	8,760	8,760	3.39	lb/VMT	2,774		VMT/yr	1.07	3.54 (d)	3.54	
1654	Unpaved Segment 4	Line	Fug Dust	30	PM	8,760	8,760	12.26	lb/VMT	529		VMT/yr	0.74	2.45 (d)	2.45	
1654	Unpaved Segment 4	Line	Fug Dust	31	PM10	8,760	8,760	4.46	lb/VMT	529		VMT/yr	0.27	0.89 (d)	0.89	
1655	Unpaved Segment 5	Line	Fug Dust	30	PM	8,760	8,760	9.31	lb/VMT	730		VMT/yr	0.78	2.56 (d)	2.56	
1655	Unpaved Segment 5	Line	Fug Dust	31	PM10	8,760	8,760	3.39	lb/VMT	730		VMT/yr	0.28	0.93 (d)	0.93	
1656	Unpaved Segment 6	Line	Fug Dust	30	PM	8,760	8,760	9.31	lb/VMT	438		VMT/yr	0.47	1.54 (d)	1.54	
1656	Unpaved Segment 6	Line	Fug Dust	31	PM10	8,760	8,760	3.39	lb/VMT	438		VMT/yr	0.17	0.56 (d)	0.56	
*																

Emissions Inventory Group ID: 41.0
Emissions Inventory Group Name: Roads
Tier 1 Permit Group ID: 11.0

Notes:

All row additions and subtractions must occur between the rows marked with a "*"
(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.
(b) Maximum Hourly Emissions (lbs/hr) = Emission Factor (lbs/VMT) x Actual Annual Throughput (VMT/yr) / (8,760 hrs/yr)
(c) Actual Annual Emissions (tons/yr) = Emission Factor (lbs/VMT) x Actual Annual Throughput (VMT/yr) / (2,000 lbs/ton) x (1 - number of "wet" days with at least 0.254 mm of precipitation / (4 x 365))
(d) Actual Annual Emissions (tons/yr) = Emission Factor (lbs/VMT) x Actual Annual Throughput (VMT/yr) / (2,000 lbs/ton) x (365 - number of "wet" days with at least 0.254 mm of precipitation) / 365
(e) Maximum Annual Emissions (tons/yr) = Actual Annual Emissions (tons/yr)

References:

1 AP-42, 13.2.1 equation (1) (11/06). Maximum emissions limits from Tier I permit No. T1-040313 are exceeded, therefore maximum emissions are calculated rather than set equal to the permit limits.
2 AP-42, 13/2.2 equation (1a) (11/06). Maximum emissions limits from Tier I permit No. T1-040313 are exceeded, therefore maximum emissions are calculated rather than set equal to the permit limits.

Emissions Inventory Group ID: 42.0
Emissions Inventory Group Name: Gypsum Stack/Pond and Transport
Tier 1 Permit Group ID:

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)		Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units			Actual [c]	Maximum	
*																	
1508	Gypsum Decant Tank	Fug	Outside	17	Fluorides	8,760	8,760	4.15E-03	lb/day	365	365	days/yr	2.25E-04	(b)	7.58E-04	9.86E-04 (d)	1
1701	Gypsum Stack Pond	Fug	Pond Surface	17	Fluorides	8,760	8,760	339.2	lb/day	365	365	days/yr	17.5		61.9	76.7	2
1713	Wind-Blown Dust	Fug	Outside	30	PM	8,760	8,760	62.1	lb/day	365	365	days/yr	2.59		11.3	11.3	3
1713	Wind-Blown Dust	Fug	Outside	31	PM10	8,760	8,760	30.2	lb/day	365	365	days/yr	4.30		5.5	18.84	4
*																	

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Emission factor of 1.6 lb/acre-day was used (site specific factor). Gypsum Decant Tank has a diameter of 12'.

2 Emission factor of 1.6 lb/acre-day was used (site specific factor). Gypsum Stack Pond is 212 acres. Lb/Hr and Ton/Yr maximum emission limit from Tier II permit No. 077-00006 includes all activity on Gypsum Stack.

3 Emission factor of 3.5 lb/acre-day was used (historical value from WESTAR emissions inventory). Gypsum Stack (minus pond area) is 177.5 acres. Conservatively ssume that 10% of the stack area is disturbed between wind erosion events. In accordance with AP-42, wind erosion only occurs from recently disturbed portions of the stack.

4 Emission factor of 1.7 lb/acre-day was used (historical value from WESTAR emissions inventory). See Reference 3 above for usage. Lb/Hr and Ton/Yr maximum emission limit from Tier I permit No. T1-040313.

Emissions Inventory Group ID: 43.0
Emissions Inventory Group Name: Construction/Demolition Debris Landfill Operation
Tier 1 Permit Group ID:

Source ID	Source Name	Source Type	Emission Point	Pollutant ID [a]	Pollutant Name	Annual Operating Hours		Emission Factor		Annual Throughput			Maximum Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)		Reference Number
						Actual	Maximum			Actual	Maximum	Units		Actual [c]	Maximum [d]	
*																
1711.1	Landfill Operation	Fug	Outside	30	PM	2,236	2,236	3.94	lb/hr	2,236	2,236	hrs/yr	5.12	4.41	5.73	1
1711.1	Landfill Operation	Fug	Outside	31	PM10	2,236	2,236	0.75	lb/hr	2,236	2,236	hrs/yr	0.98	0.84	1.09	1
*																

Notes:

All row additions and subtractions must occur between the rows marked with a "*"

(a) Unique identification number assigned to each pollutant in the emissions inventory; contained in summary sheets.

(b) Maximum Hourly emissions are typically estimated based on an emission factor multiplied by a maximum annual throughput (or utilization factor), divided by the maximum hours per year that the source is expected to operate. However, if an hourly emission rate based on 130% of the actual estimated annual emissions and actual hours of operation provides a higher rate, it was conservatively used instead. The exact logic applied to the Maximum Hourly emission rate calculation can be expressed as follows:

IF (1.3 x (Actual Hourly Emissions [lbs/hr])) < ((Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr]) THEN

Maximum Hourly Emissions (lb/hr) = (Maximum Annual throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE IF (Actual Hours of Operation / Maximum Hours of Operation)≥ (Actual Annual Throughput / Maximum Annual Throughput) THEN

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Maximum Hours of Operation [hrs/yr])

ELSE

Maximum Hourly Emissions (lb/hr) = 1.3 x (Maximum Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (Actual Hours of Operation [hrs/yr])

WHERE

Actual Hourly Emissions (lbs/hr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [units/hr]) / (Actual Hours of Operation [hrs/yr])

(c) Actual Annual Emissions (ton/yr) = (Actual Annual Throughput [units/yr]) x (Emission Factor [lbs/unit]) / (2000 lbs/ton)

(d) Maximum Annual Emissions (ton/yr) = Maximum Value of ((Actual Hourly Emissions [lbs/hr]) x (Maximum Hours of Operation [hrs/yr]) / (2000 lbs/ton)) or ((Maximum Hourly Emissions [lbs/hr]) x (Actual Hours of Operation [hrs/yr]) / (2000 lbs/ton))

References:

1 Emission factor from AP-42 Table 11.9-1, material moisture and silt content from AP-42 Table 11.9-3 geometric mean for overburden.

APPENDIX D
ROAD DUST EMISSIONS CALCULATIONS

Paved Road Emissions
J.R. Simplot, Pocatello, Idaho

Segment Number	Distance (miles)	Trips per Day	Vehicle Mile Traveled [a] (VMT/day)	Vehicle Weight (tons)	Maximum PM Emission Factor [b] (lb/VMT)	Maximum PM_{10} Emission Factor [b] (lb/VMT)	Maximum Daily PM Emissions [c] (lbs/day)	Maximum Daily PM_{10} Emissions [c] (lbs/day)	Annual Average PM Emissions [d] (tons/yr)	Annual Average PM_{10} Emissions [d] (tons/yr)
1	0.7	30	21	3.25	1.82E-03	0.00E+00	3.83E-02	0.00E+00	6.56E-03	0.00E+00
2	0.5	25	12.5	3.25	1.82E-03	0.00E+00	2.28E-02	0.00E+00	3.90E-03	0.00E+00
3	1.70	13	22.1	31.50	6.87E-02	1.30E-02	1.52E+00	2.88E-01	2.60E-01	4.93E-02
4	1.80	11	19.8	31.50	6.87E-02	1.30E-02	1.36E+00	2.58E-01	2.33E-01	4.42E-02
5	1.3	3	3.9	31.50	6.87E-02	1.30E-02	2.68E-01	5.08E-02	4.59E-02	8.71E-03
6	1.6	2	3.2	31.50	6.87E-02	1.30E-02	2.20E-01	4.17E-02	3.77E-02	7.14E-03
7	0.9	5	4.5	31.50	6.87E-02	1.30E-02	3.09E-01	5.87E-02	5.30E-02	1.00E-02
8	0.3	3	0.9	31.50	6.87E-02	1.30E-02	6.19E-02	1.17E-02	1.06E-02	2.01E-03
9	1.7	2	3.4	31.50	6.87E-02	1.30E-02	2.34E-01	4.43E-02	4.00E-02	7.59E-03
10	0.2	26	5.2	3.25	1.82E-03	0.00E+00	9.48E-03	0.00E+00	1.62E-03	0.00E+00
						Total	4.04	0.75	0.69	0.13
						Hourly Average	0.17	0.03	--	--

Notes:

(a) Vehicle Mile Traveled (VMT/day) = Distance Traveled (miles) x (Trips per Day)

(b) Emission Factor (lb/VMT) = (particle size multiplier, k) x (road surface silt loading [g/m2], sL / 2) ^ (0.65) x (mean vehicle weight [tons], W / 3) ^ (1.5) - (emission factor for 1980's vehicle fleet exhaust brake and tire wear [lb/VMT], C)

road surface silt loading (g/m2), sL =	0.00678		(2)
	PM	PM10	
k =	0.082	0.016	(3)
C =	0.00047	0.00047	(4)

(c) Maximum Daily Emissions (lbs/day) = Emission Factor (lb/VMT) x Vehicle Mile Traveled (VMT/day)

(d) Annual Average Emissions (tons/yr) = Maximum Daily Emissions (lbs/day) x (365 days/yr) / (2000 lbs/ton) x (1 - (number of "wet" days with at least 0.254 mm of precipitation, P) / (4 x 365))

number of "wet" days with at least 0.254 mm of precipitation (days/yr), P = 90 (5)

References:

(1) Emission factor equation from AP-42, 13.2.1 equation (1) for paved roads (November 2006). If calculated emission factor is negative, emission factor is set to zero.

(2) Based on averaged Simplot measurements of 0.0002 ounces/square yard.

(3) AP-42, Table 13.2-1.1 (November, 2006).

(4) AP-42, Table 13.2.1-2 (November, 2006).

(5) AP-42, Figure 13.2.2-1 (November, 2006).

Unpaved Road Emissions
J.R. Simplot, Pocatello, Idaho

Segment Number	Distance (miles)	Trips per Day	Vehicle Mile Traveled [a] (VMT/day)	Vehicle Weight (tons)	Maximum PM Emission Factor [b] (lb/VMT)	Maximum PM_{10} Emission Factor [b] (lb/VMT)	Maximum Daily PM Emissions [c] (lbs/day)	Maximum Daily PM_{10} Emissions [c] (lbs/day)	Annual Average PM Emissions [d] (tons/yr)	Annual Average PM_{10} Emissions [d] (tons/yr)
1	4.8	4	19.20	3.25	9.31	3.39	178.69	65.03	24.57	8.94
2	0.5	8	4	3.25	9.31	3.39	37.23	13.55	5.12	1.86
3	0.95	8	7.6	3.25	9.31	3.39	70.73	25.74	9.73	3.54
4	1.45	1	1.45	6.00	12.26	4.46	17.78	6.47	2.45	0.89
5	2.0	1	2	3.25	9.31	3.39	18.61	6.77	2.56	0.93
6	0.3	4	1.2	3.25	9.31	3.39	11.17	4.06	1.54	0.56
						Total	334.22	121.63	45.95	16.72
						Hourly Average	13.93	5.07	--	--

Notes:

(a) Vehicle Mile Traveled (VMT/day) = Distance Traveled (miles) x (Trips per Day)

(b) Emission Factor (lb/VMT) = (empirical constant, k) x (surface material silt content [%], s / 12) ^ (empirical constant, a) x (mean vehicle weight [tons], W / 3) ^ (empirical constant, b)

surface material silt content (%), s = 28.5 (2)

	PM	PM10	
k =	4.9	1.5	(3)
a =	0.7	0.9	(3)
b =	0.45	0.45	(3)

(c) Maximum Daily Emissions (lbs/day) = Emission Factor (lb/VMT) x Vehicle Mile Traveled (VMT/day)

(d) Annual Average Emissions (tons/yr) = Maximum Daily Emissions (lbs/day) x (365 days/yr) / (2000 lbs/ton) x {(365 - number of days in a year with at least 0.254 mm of precipitation, P) / 365}

number of days in a year with at least 0.254 mm of precipitation (days/yr), P = 90 (4)

References:

(1) Emission factor equation from AP-42, 13.2.2 equation (1a) for unpaved roads (November 2006).

(2) From historical (1989) engineering estimate by Simplot.

(3) AP-42, Table 13.2.2-2 for industrial roads (November, 2006).

(4) AP-42, Figure 13.2.2-1 (November, 2006).

Road Emissions Summary
J.R. Simplot, Pocatello, Idaho

Pollutant	Basis	Paved	Unpaved	Total	Limits
PM	Hourly (lbs/hr)	0.17	13.93	14.09	3.12
PM_{10}	Hourly (lbs/hr)	0.03	5.07	5.10	1.94
PM	Annual (tons/yr)	0.69	45.95	46.65	13.65
PM_{10}	Annual (tons/yr)	0.13	16.72	16.85	8.48

Golder Associates
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TRANSMITTAL LETTER

TO: IDEQ
1410 North Hilton
Boise, ID 83706

Attention: Shawnee Chen

DATE: October 18, 2007

PROJECT NO.: 063-9791

SENT VIA:

- X Federal Express
- ☐ U.S. Mail
- ☐ Courier
- ☐ Hand Delivery
- ☐ Other: _____

QUANTITY	ITEM	DESCRIPTION
1	Letter	Response to Application Incompleteness Determination
1	CD	Emissions Calculation Spreadsheet File

REMARKS:

Please notify us if the items above are not received as indicated.

Thank you

Per Brian Patterson

Golder Associates Inc.
9 Monroe Parkway, Suite 270
Lake Oswego, Oregon 97035
Telephone: (503) 607 1820
Fax: (503) 607 1825

Golder Associates

October 18, 2007

Our Ref.: 063-9791

Idaho Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706

Attention: Shawnee Chen

RE: RESPONSE TO TIER I OPERATING PERMIT RENEWAL APPLICATION INCOMPLETENESS DETERMINATION
FACILITY ID NO. 077-00006
J.R. SIMPLOT CO. – DON SIDING PLANT, POCATELLO

Dear Shawnee,

Golder Associates Inc. has been requested by J.R. Simplot Company (Simplot) to respond to the Tier I Operating permit renewal application incompleteness determination letter sent to the Simplot Pocatello plant, dated August 20, 2007. Including a 30 day extension to the original deadline granted by the Idaho Department of Environmental Quality (DEQ), it was indicated that a response to the August 20th letter is required in writing by October 19, 2007. The information requested by the DEQ is repeated below (in bold font), followed by a response (in italic font).

1. **For Granulation No. 1, for each scrubber, please provide the allowable ranges for 1) the pressure drop across the scrubber and 2) the flow rate of the scrubbing liquid to the scrubber.**

   These allowable ranges were established pursuant to the Permit Condition 7.17(1) or (2), as required in Tier I OP Permit Condition 7.10. (p.10 of the application)

   Response: The allowable ranges for the Granulation No. 1 Reactor/Granulator scrubber and the Dryer scrubber are provided in the table below. These ranges will be updated based on ongoing source testing, and are not to be considered permit limits.

Scrubber	*Indicator*	*Maximum Range*	*Minimum Range*
R/G Scrubber	*Flow Rate*	*379 gpm*	*253 gpm*
	Pressure Drop	*20.7"*	*13.8"*
Dryer Scrubber	*Flow Rate*	*400 gpm*	*267 gpm*
	Pressure Drop	*11.5"*	*2.74"*

2. For Granulation No. 1, and 2 processes (p.3, p.11, & p.13 of the application)

2.1 40 CFR 63 Subpart BB proposed after November 15, 1990 is for total fluorides emissions limits. Therefore, CAM is exempt for the compliance with total fluorides emissions limits. Since CAM is pollutant specific, should the granulator, the reactor, and dryer be subject to CAM for PM/PM_{10} limits? Please explain why or why not. If yes, please submit information in accordance with 40 CFR 64 (CAM).

Response: Simplot agrees that exclusion of fluorides from CAM requirements for these sources based on applicability of 40 CFR 63 Subpart BB does not imply exclusion of PM/PM_{10} from CAM requirements. Table 6 has been updated to consider PM/PM_{10} for these sources (see Attachment 1 for a revised version of Table 6) and CAM plans are being submitted for cases where the uncontrolled PM/PM_{10} emission rate exceeds 100 tons per year. The revised CAM plans are included in Attachment 2.

2.2 Please describe the processes and their control in detail. Please provide process flow diagrams for Granulation No. 1, and 2 processes. The information in the current Tier I Operating Permit and the information in the June 29, 2000 application are different.

Response: The process descriptions of the Granulation No. 1 and Granulation No. 2 process are provided below. Process flow diagrams of the Granulation No. 1 and Granulation No. 2 systems are provided in Attachment 3.

Granulation No. 1:

Granulation No. 1 normally produces mono-ammonium phosphate (MAP, 11-52-0) and ammonium phosphate sulfate (16-20-0) granulated products (N-P-K). The Granulation No. 1 process involves reacting phosphoric acid with ammonia and, in some products, sulfuric acid to produce ammonium phosphate or ammonium phosphate-sulfate slurry. The slurry is sprayed onto a recycle stream of product in the granulator. Depending on the product, phosphoric acid is also added at this time or ammonia is sparged into the recycle bed. Process gases from both the reactor and granulator are combined in a common stream before passing through the R/G venturi separator scrubber. A blowdown stream of scrubber liquor is transferred to the reactor and the cleaned air stream is discharged to the atmosphere. The product from the granulator is transferred to the dryer where it is dried. A cyclone dust collector removes the larger dust particles entrained in the off-gases exiting the dryer. This dust returns directly to the drag conveyer below the cyclones outlet. Finer dust particles and gaseous pollutants are removed as they pass through the dryer venturi separator scrubber, with the exhaust exiting through the dryer stack..

The product stream is screened into three fractions: oversized, product, and fines. The fines report directly to the recycle while the oversize first passes through a cage mill where it is crushed. A slip stream off the product stream undergoes a second screening to further reduce the percentage of fines. The size of this stream is regulated by the motor amp draw on the granulator elevator. Fines from the

polishing screen are returned to the recycle drag. The product collected in the recycle drag returns to the granulator and the process is repeated. Dust from the screening process passes through the Granulation No. 1 vent baghouse dust collector where it is separated from the air. The dust removed in the vent baghouse is transported to the recycle drag conveyor.

The product stream is transferred to the fluidized bed cooler, cooled, and then coated with wax for dust control before being sent out to the warehouse. The dust laden off-gas stream from the fluidized bed cooler passes through the cooler baghouse dust collector where the particulates are separated from the air. The dust removed in the baghouse is transported to the recycle drag via a screw conveyor. The cleaned air stream is ducted to the dryer burner, where its heat value is reclaimed.

In reviewing the process description, Simplot has identified a correction in Table 7.1 of the Tier I permit. The emission point identification number 400.0 should be corrected to identify just the dryer as the emission unit.

Granulation No. 2

Granulation No. 2 normally produces mono-ammonium phosphate (MAP, 11-52-0) and di-ammonium phosphate (DAP, 18-46-0) granulated products (N-P-K). The Granulation No. 2 process involves reacting phosphoric acid with ammonia to produce ammonium phosphate slurry. The slurry is sprayed onto a recycle stream of product in the granulator. Depending on the product, phosphoric acid is added at this time, or ammonia is sparged into the recycle bed. Off-gases from both the reactor and granulator are combined in a common stream before passing through a high-mole spray scrubber separator and on to a low-mole scrubber. The combined air streams from the reactor and granulator systems receive a final scrubbing in the tail gas scrubber. The product from the granulator is transferred to the dryer where it is dried. A cyclone dust collector removes the larger dust particles entrained in the off-gases exiting the dryer. This dust returns directly to the drag conveyer below the cyclone's outlet. Finer dust particles and gaseous pollutants are removed as they pass through the dryer venturi scrubber. The cleaned air stream is combined with the R/G scrubber off-gas stream before the final scrubbing in the tail gas scrubber.

This stream is screened into three fractions: oversized, product, and fines. The fines report directly to the recycle while the oversize first passes through a cage mill where it is crushed. A slip stream off the product stream undergoes a second screening to further reduce the percentage of fines. The size of this stream is regulated by the motor amp draw on the granulator elevator. Fines from the polishing screen are returned to the recycle drag. The product collected in the recycle drag is then returned to the granulator and the process is repeated. . Dust from the screening process passes through the Granulation No. 2 baghouse dust collector where it is separated from the air. The dust removed in the baghouse is transported to the recycle drag conveyor by a screw conveyor.

The product stream is transferred to the rotary cooler, cooled, and then coated with wax for dust control before being sent out to the warehouse. The dust laden off-gas stream from the cooler passes through the cooler baghouse dust collector where the

particulates are separated from the air. The dust removed in the baghouse is transported to the recycle drag via a screw conveyor. The cleaned air stream is then combined with the air off the dust baghouse and discharged to the atmosphere.

2.3 **Please submit the CAM plan for baghouses in accordance with 40 CFR 64.4-Submittal Requirements. EPA's Cam Technical Guidance Document uses bag inspection and maintenance as indicators. EPA's CAM training (August 2006, Boise ID) recommended bag leaking detector. See examples A.19a and A.19b of EPA's Cam Technical Guidance Document. Pressure drop is not sensitive enough to detect how the baghouse is doing until the baghouse has big problems (e.g. broken bags).**

Response: These CAM plans have been revised to more completely meet the 40 CFR 64.4 requirements and are provided in Attachment 2.

Although bag leak detectors are sometimes used to provide continuous compliance data to meet the CAM requirements, other acceptable approaches also exist, and are more prevalent in existing Title V permits. The most common approach to CAM for baghouses is pressure drop across the bags and visual emissions monitoring. Relative to the same EPA CAM Technical Guidance Document cited above, plans A.10 and A.13 rely on pressure drop and visual emissions monitoring as the primary basis for CAM. This would be in addition to the periodic source testing already required.

Therefore, the revised CAM plans being submitted for the Granulation No. 1 and No. 2 baghouses are proposing that pressure drop and daily visual emissions observation be used for CAM.

3. Granulation No. 3 Process (p. 14 of the application)

3.1 Please describe the process and their controls in detail. For scrubbers, please provide the respective scrubber type, manufacturer's descriptions and specifications, and the O&M manual. Please provide the process flow diagram from Granulation No. 3. The one in the June 29, 2000 Tier I application is not current because the process was upgraded after 2000 application.

Response: Granulation No. 3 normally produces low fluoride, mono-or di-calcium phosphate products used to make livestock supplement and specialty fertilizers. The Granulation No. 3 process involves reacting phosphoric acid with ground limestone to produce calcium phosphate slurry. Phosphoric acid feed is pumped from the feed tank to the High Speed Mixer. The slurry is mixed with recycled granules and dried. A cyclone dust collector removes dust from the gases exiting the dryer. This dust returns to the drag conveyer via the screw below the cyclone outlets. The Entoleter scrubber water sprays absorb fluorine compounds evolving from the dryer. The dried granules are then screened into three sizes: product, oversize, and fines. A small portion of the product size is sent to storage while the remainder is recycled through the system with the fines and crushed oversized material. Dust from the screening process passes through the Granulation No. 3 baghouse dust collector

where it is separated from the air. The dust removed in the baghouse is transported to the recycle drag conveyer.

The Granulation No. 3 Entoleter scrubber is a Centrifield® Vortex Model 0906 Scrubber. The Centrifield Vortex Scrubber is a high efficiency liquid/gas contactor utilizing Entoleter's patented Centripetal Vortex contactor to clean gases before they exhaust to the atmosphere. The Operation and Maintenance manual has previously been submitted to the Idaho DEQ and is maintained onsite at the facility.

Low fluoride phosphoric acid is produced in the defluorination process by heating the phosphoric acid in the defluorination reactor tank, then adding diatomaceous earth as a silica source. The fluoride in the phosphoric acid volatilizes as silica tetrafluoride. A crossflow defluorination scrubber is used to control emissions from this process.

3.2 **Please submit the CAM plan for baghouse in accordance with 40 CFR 64.4 - Submittal Requirements. EPA's Cam Technical Guidance Document uses bag inspection and maintenance as indicators. EPA's CAM training (August 2006, Boise ID) recommended bag leaking detector. See examples A.19a and A.19b of EPA's Cam Technical Guidance Document. Pressure drop is not sensitive enough to detect how the baghouse is doing until the baghouse has big problems (e.g. broken bags).**

Response: This CAM plan has been revised to more completely meet the 40 CFR 64.4 requirements and is provided in Attachment 2.

Although bag leak detectors are sometimes used to provide continuous compliance data to meet the CAM requirements, other acceptable approaches also exist, and are more prevalent in existing Title V permits. The most common approach to CAM for baghouses is pressure drop across the bags and visual emissions monitoring. Relative to the same EPA CAM Technical Guidance Document cited above, plans A.10 and A.13 rely on pressure drop and visual emissions monitoring as the primary basis for CAM. This would be in addition to the periodic source testing already required.

Therefore, the revised CAM plan being submitted for the Granulation No. 3 baghouse is proposing that pressure drop and daily visual emissions observation be used for CAM.

3.3 **The Granulation No. 3 process appears to be subject to CAM for HF emissions. If that is the case, the Defluorination scrubber is subject to CAM requirements too. Please review and verify (Table 6 of the application).**

Response: The permit limit for Granulation No. 3 is for Total Fluorides, which is not a listed hazardous air pollutant. In addition, the exact composition of the fluorides emitted from the Granulation No. 3 process is not known, but is expected to contain a large percentage of fluorosilicates, as opposed to HF. Therefore, the uncontrolled emission threshold for CAM applicability is 100 tons per year of Total Fluorides.

Estimated uncontrolled emissions of Total Fluorides do not exceed this threshold (see Table 6); therefore, CAM is not applicable for this pollutant.

However, since this process already has CAM requirements for PM/PM_{10}, and the CAM approach for HF or Total Fluorides would be similar, Total Fluorides has been added as a pollutant addressed by the CAM plans for Granulation No. 3. EPA-recommended indicators for wet scrubbers controlling fluorides are pressure drop and scrubber liquid flow rate (see EPA CAM Illustration B.5b, January 2005). The revised CAM plan is provided in Attachment 2.

4. For phosphoric acid plant No. 400, please provide the indicator ranges for digester scrubber and Belt filter scrubber. (p.16 of the application)

Response: The allowable ranges for the Phosphoric Acid Plant No. 400 Belt Filter scrubber and the Digester scrubber are provided in the table below. These ranges will be updated based on ongoing source testing, and are not to be considered permit limits.

Scrubber	*Indicator*	*Maximum Range*	*Minimum Range*
Belt Filter Scrubber	*Flow Rate*	*6,952 gpm*	*4,634 gpm*
	Pressure Drop	*8.45"*	*0.82"*
Digester Scrubber	*Flow Rate*	*612 gpm*	*408 gpm*
	Pressure Drop	*4.00"*	*1.1"*

5. For Reclaim Cooling Tower Cells Plant/Evaporative Cooling Towers, has Permit Conditions 14.6.1 and 14.7.1 been fulfilled? When each testing was conducted? (p.17 of the application).

Response: Recent source testing for PM/PM_{10} as required by Condition 14.6.1 was conducted as follows:

5/12-14/2003 (Method 5; Cells 3, 6, & 8)
5/18-20/2004 (Method 5/202; Cells 1, 4, & 7)
4/26-5/4/2005 (Method 5/202; Cells 2, 3, 5, 6, 7, & 8)
4/25-5/5/2006 (Method 5/202; Cells 1, 2, 4, 5, 7, & 8)
4/23-26/2007 (Method 5/202; Cells 2, 5, & 7)

Source testing for Total Fluorides as required by Condition 14.7.1 was conducted 8/20-22/2002.

6. For Superphosphoric Acid Plant/Superphosphoric Acid Process Line:

6.1 Per the application, changes were made to the plant (e.g. fugitive control). Please update the process description in the existing permit and please include the description of the control in detail. (p.18 of the application)

Response: *The superphosphoric acid plant process description from the Tier I permit has been updated to describe the current process:*

Page 73 of 140: Acid Evaporation

Acid evaporation – Incoming feed phosphoric acid is vacuum-evaporated in equipment similar to the phosphoric acid plant evaporators. The vaporization of constituent compounds, such as water, concentrates the remaining phosphoric acid into SPA. The vapors extracted in this process are condensed in a non-contact condenser. The remaining vapors, and the vapors from the evaporator feed tank, are processed through the primary control scrubber to capture fluoride emissions prior to discharge to the atmosphere. The primary control scrubber effluent is sent through the gypsum thickener and finally to the gypsum stack.

Page 73 of 140: Acid Oxidation

Acid oxidation – SPA is transported to an oxidation-reaction vessel where residual impurities are oxidized by HNO3. The oxidation of the impurities clarifies the SPA and it takes on a brilliant green color inherent of phosphoric acid. The NOx produced during oxidation, in both the reactor vessel and the first stage aging tank, is collected, pressurized, and then extracted from the effluent stream in extended absorption scrubbers, two in series. The extended absorption scrubber effluent is finally processed through the primary control scrubber prior to discharge to the atmosphere. The primary control scrubber effluent is sent through the gypsum thickener and finally to the gypsum stack.

Page 73 of 140: Acid Aging and Cooling

Acid aging and cooling – SPA is allowed to cure in aging tanks prior to cooling in heat exchangers. The aging allows time for residual reactions to go to completion. Fumes from the second and third stage aging tanks are processed through the primary control scrubber prior to discharge to the atmosphere. The primary control scrubber effluent is sent through the gypsum thickener and finally to the gypsum stack.

Page 74 of 140: Table 15.1 Emissions Sources

Source ID	*Emissions Unit(s)/ Process(es)*	*Source Description*	*Emissions Control Device*	*Emissions Point*
1102.0	*Product Tank*	*SPA plant/storage*	*Primary control scrubber*	*Scrubber stack*
1108.1	*Evaporators*	*SPA plant/process equipment*	*Non-contact condenser and primary control scrubber*	
1108.2	*Sump No. 6*	*SPA plant/process equipment*	*Primary control scrubber*	

Source ID	Emissions Unit(s)/ Process(es)	Source Description	Emissions Control Device	Emissions Point
1109.0	Oxidizer and First Stage Aging Tank	SPA plant/purification	Extended absorption and primary control scrubber	Scrubber stack (continued)
1111.0[1]	Second and Third Stage Aging Tanks	SPA plant/purification	Primary control scrubber	
1112.0	Evaporator Feed Tank	SPA plant/storage	Primary control scrubber	
1113.0	Effluent Tank	SPA plant	Primary control scrubber	
1506.0	Deflo-dilution Tank	SPA plant/storage	None	

[1] *Note that this is an addition to the list of sources in the current Tier I permit.*

6.2 **Simplot requested to remove Permit Condition 15.15. Would you please provide the following information to support the request: a) when the source test was conducted, 2) did the test demonstrate compliance, and 3) a summary test report and DEQ approval letter? (p.18 of the application)**

Response: The required source test was conducted by TETCO (Lehi, Utah) on December 9, 2004. This test report was received by IDEQ on January 7, 2005 and was reviewed in an April 11, 2005 letter from Mr. Rick Elkins (IDEQ) to Mr. Leon Pruett (J.R. Simplot), which is provided in Attachment 4. In that letter, IDEQ acknowledges that the test demonstrated compliance with the CO emission limit. Another copy of the December 9, 2004 source test report can be provided if requested.

6.3 **What are the scrubber's indicator ranges? How were the ranges determined? (p.19 of the application)**

Response: The allowable ranges for the Superphosphoric Acid Plant Fluoride scrubber are provided in the table below. These ranges will be updated based on ongoing source testing, and are not to be considered permit limits.

Scrubber	Indicator	Maximum Range	Minimum Range
Superphosphoric Acid Plant Fluoride Scrubber	Flow Rate	87 gpm	58 gpm
	Pressure Drop	10.9"	0.9"

The ranges were determined in accordance to the maximum achievable control technology requirements of 40 CFR 63.60(d).

7. Sulfuric Acid Plant No. 300 scrubbers (p. 20 of the application)

7.1 Please describe the DynaWave scrubber and explain why the DynaWave scrubber is an integral part of the sulfuric acid production process.

Response: The function of the ammonia scrubbing system is to remove SO_2 that was not converted to SO_3 from the process gas exiting the absorbing tower. The scrubbing system consists of two separate scrubbing stages. The first stage is a DynaWave® SO_2 scrubber, a chevron demister, ammonia absorption chamber and scrubber liquor circulation pumps. The second stage is the AmmSOx scrubber consisting of the packed scrubbing tower, retention chamber, scrubber circulation pumps, and demister section. The scrubber system also consists of a stripping system that recovers the scrubbed SO_2 for recycling to the drying tower.

The DynaWave® SO_2 scrubber is a vertical gas/liquid contact barrel and spray jet, connected to a disengagement vessel. The disengagement vessel is a vertical, cylindrical vessel. Process gas from the absorbing tower enters the top of the vertical DynaWave® barrel and collides with a jet of circulating liquid, which is injected upward through a large bore nozzle. A region of highly turbulent flow and mixing is created at the point the liquid is reversed by the gas. The gas and scrubbing solution enter the disengagement vessel where the gas and liquid are separated. A circulation pump circulates the scrubbing liquid back to the DynaWave® nozzle and pumps the product liquor to the existing acidifier and stripping tower. Process gas passes through the chevron demister and out of the disengagement vessel. The DynaWave® scrubber removes most of the SO_2 from the process gas before entering the AmmSOx scrubber.

The DynaWave® scrubber is integral to the process in that it does not vent to atmosphere; rather, it vents to the AmmSOx scrubber, which is a control device that has CAM requirements. A process flow diagram of the Sulfuric Acid Plant No. 300 scrubbers is provided in Attachment 3.

7.2 **Please submit the CAM plan for AmmSOx scrubber in accordance with 40 CFR 64.4 – Submittal Requirements. EPA's Cam Technical Guidance Document uses scrubber liquid pH and scrubber liquid flow as indicators. See examples A.20 and A.4b of EPA's Cam Technical Guidance Document.**

Response: Simplot has reviewed the scrubbing system operation with the manufacturer and has concluded that the pH of the scrubbing liquor does not appreciably affect sulfuric acid mist emissions from the AmmSOx scrubber. Sulfuric acid mist emissions are primarily determined by the presence of the mist eliminators. PM emissions are controlled by the scrubber, but this control is independent of pH.

The mist eliminators require little maintenance and no continuous compliance indicators could be determined; therefore, only periodic inspections of the mist eliminators are being proposed (every two years, which coincides with the plant maintenance schedule).

The AmmSOx scrubber is primarily designed to control SO_2 emissions from the process, but also has a role in controlling PM emissions.

Due to the harsh chemical environment in the AmmSOx scrubber, it would be difficult to install monitoring equipment to measure the scrubber liquid circulation rate. Simplot believes that the best indicator of proper scrubber performance is the SO_2 emission rate, as measured by the SO_2 continuous emissions monitoring system (CEMS).

Based on recent source test data, the measured SO_2 emissions from the Sulfuric Acid Plant No. 300 represent approximately 60% of the SO_2 pound per hour emission limit on average (see Table 1 attached). This compares to measured PM emissions averaging approximately 20% of the PM pound per hour emission limit. Thus, it is reasonable to expect that if the AmmSOx scrubber efficiency were to degrade, the SO_2 pound per hour limit would be exceeded well before the PM limit.

Based on this information, the SO_2 CEMS is proposed as the continuous compliance indicator for PM for the AmmSOx scrubber and the indicator range would be for SO_2 emissions to be less than the SO_2 pound per hour limit.

The revised CAM plan is provided in Attachment 2.

7.3 **Please provide details on the AmmSOx scrubber. (scrubber types, manufacturer's design specifications and operating recommendations, scrubber O&M manual, etc.)**

Gas leaving the DynaWave® scrubber enters the AmmSOx packed tower scrubber where further scrubbing is performed. The *AmmSOx scrubber consists of a packed scrubbing tower, retention chamber, scrubber circulation pumps, and demister section. The scrubber system also consists of a stripping system that recovers the scrubbed SO_2 for recycling to the drying tower. The gas exits the packed tower through the mist eliminator elements and proceeds to the plant stack.*

The Operation and Maintenance manual has previously been submitted to the Idaho DEQ and is maintained onsite at the facility.

8. Please provide spreadsheets in electronic form so that detailed emissions calculations and calculation formulas can be reviewed (refer to spreadsheets in Appendix C of the application).

Response: Electronic spreadsheet files (Microsoft Excel format) are being provided on a CD as part of this response to comments document.

9. Please update Table 5 of the application. The newest MACT is now Subpart QQQQQQ.

Response: A revision of Table 5 is being provided with this document (provided in Attachment 1). There are no additional applicable MACT standards shown.

Please contact me if you have any questions or need additional information.

Sincerely,

GOLDER ASSOCIATES INC.

Brian Patterson, Ph.D.
Senior Consultant

BCP/DML

Attachments: Table 1
Attachment 1 – Revised Application Tables 5 and 6
Attachment 2 - CAM Plans
Attachment 3 – Process Flow Diagrams
Attachment 4 – IDEQ April 11, 2005 Letter

cc: Bob Willey, J.R. Simplot Company, Pocatello, ID

Table 1
Summary of Recent Compliance Test Results
Sulfuric Acid Plant No. 300
J.R. Simplot Company, Pocatello, Idaho

Test Date	Measured SO_2 Emission Rate (lb/hr)	SO_2 Emission Limit (lb/hr, 3-hr avg.)	Measured % of SO_2 Limit	Measured PM Emission Rate (lb/hr)	PM Emission Limit (lb/hr)	Measured % of lb/hr H_2SO_4 Limit
Sept 2004	78.2	170	46.0%	2.41	21.38	11.3%
May 2005	94.4	170	55.5%	4.89	21.47	22.8%
May 2006	118.6	170	69.7%	5.81	21.33	27.2%
May 2007	105.6	170	62.1%	4.12	21.13	19.5%
		Average:	**58.3%**		**Average:**	**20.2%**

Attachment 1
Revised Application Tables 5 and 6

Table 5 – Applicable and Non-Applicable National Emission Standards For Hazardous Air Pollutants For Source Categories (40 CFR Part 63)

Rule Description – 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories	Applicable? (Explanation Code)
A -- General Provisions	Yes
B -- Requirements for Control Technology Determinations for Major Sources in Accordance with CAA Sections 112(g) and 112(j)	No
C -- List of Hazardous Air Pollutants, Petition Process, Lesser Quanitity Designations, Source Category List	No
D -- Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants	No
E -- Approval of State Programs and Delegation of Federal Authorities	No
F -- Synthetic Organic Chemical Manufacturing Industry	No
G -- Synthetic Organic Chemical Manufacturing Industry: Process Vents, Storage Vessels, Transfer Operations, and Wastewater	No
H -- Equipment Leaks	No
I -- Processes Subject to the Negotiated Regulation for Equipment Leaks	No
J -- Polyvinyl Chloride and Copolymers Production	No
L -- Coke Oven Batteries	No
M -- Perchloroethylene Dry Cleaning	No
N -- Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	No
O -- Ethylene Oxide Sterilization Facilities	No
Q -- Industrial Process Cooling Towers	
R -- Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	No
S -- Pulp and Paper Industry	No
T -- Halogenated Solvent Cleaning	No
U -- Group 1 Polymers and Resins	No
W -- Epoxy Resins Production and Non-Nylon Polyamides Production	No
X -- Secondary Lead Smelting	No
Y -- Marine Tank Vessel Loading Operations	No
AA -- Phosphoric Acid Manufacturing Plants	Yes
BB -- Phosphate Fertilizers Production Plants	Yes
CC -- Petroleum Refineries	No
DD -- Off-Site Waste and Recovery Operations	No
EE -- Magnetic Tape Manufacturing Operations	No
GG -- Aerospace Manufacturing and Rework Facilities	No
HH -- Oil and Natural Gas Production Facilities	No
II -- Shipbuilding and Ship Repair (Surface Coating)	No
JJ -- Wood Furniture Manufacturing Operations	No
KK -- Printing and Publishing	No
LL -- Primary Aluminum Reduction Plants	No
MM -- Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills	No
OO -- Tanks - Level 1	No
PP -- Containers	No
QQ -- Surface Impoundments	No
RR -- Individual Drain Systems	No
SS -- Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process	No
TT -- Equipment Leaks - Control Level 1	No
UU -- Equipment Leaks - Control Level 2	No
VV -- Oil-Water Separators and Organic-Water Separators	No
WW Storage Vessels (Tanks) - Control Level 2	No
XX -- Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations	No
YY -- Generic Maximum Achievable Control Technology Standards	No
CCC -- Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants	No
DDD -- Mineral Wool Production	No
EEE -- Hazardous Waste Combustors	No
GGG -- Pharmaceuticals Production	No
HHH -- Natural Gas Transmission and Storage Facilities	No
III -- Flexible Polyurethane Foam Production	No
JJJ -- Goup IV Polymers and Resins	No
LLL -- Portland Cement Manufacturing Industry	No
MMM -- Pesticide Active Ingredient Production	No

Table 5 – Applicable and Non-Applicable National Emission Standards For Hazardous Air Pollutants For Source Categories (40 CFR Part 63)

Rule Description – 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories	Applicable? (Explanation Code)
NNN -- Wool Fiberglass Manufacturing	No
OOO -- Manufacture of Amino/Phenolic Resins	No
PPP -- Polyether Polyols Production	No
QQQ -- Primary Copper Smelting	No
RRR -- Secondary Aluminum Production	No
TTT -- Primary Lead Smelting	No
UUU -- Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units	No
VVV -- Publicly Owned Treatment Works	No
XXX -- Ferroalloys Production: Ferromanganese and Silicomanganese	No
AAAA -- Municipal Solid Waste Landfills	No
CCCC -- Manufacturing of Nutritional Yeast	No
DDDD -- Plywood and Composite Wood Products	No
EEEE -- Organic Liquids Distribution (non-gasoline)	No
FFFF -- Miscellaneous Organic Chemical Manufacturing (MON)	No
GGGG -- Solvent Extraction for Vegetable Oil Production	No
HHHH -- Wet-Formed Fiberglass Mat Production	No
IIII -- Auto and Light Duty Trucks (surface coating)	No
JJJJ -- Paper and Other Web (surface coating)	No
KKKK -- Metal Can Coating (surface coating)	No
MMMM -- Miscellaneous Metal Parts and Products (surface coating)	No
NNNN -- Large Appliances (surface coating)	No
OOOO -- Fabric Printing, Coating, and Dyeing	No
PPPP -- Plastic Parts (surface coating)	No
QQQQ -- Wood Building Products (surface coating)	No
RRRR -- Metal Furniture (surface coating)	No
SSSS -- Surface Coating of Metal Coil	No
TTTT -- Leather Finishing Operations	No
UUUU -- Cellulose Products Manufacturing	No
VVVV -- Boat Manufacturing	No
WWWW -- Reinforced Plastic Composites Production	No
XXXX -- Rubber Tire Manufacturing	No
YYYY -- Stationary Combustion Turbines	No
ZZZZ -- Stationary Reciprocating Internal Combustion Engines	No
AAAAA -- Lime Manufacturing	No
BBBBB -- Semiconductor Manufacturing	No
CCCCC -- Coke Ovens: Pushing, Quenching, and Battery Stacks	No
DDDDD -- Industrial, Commercial, and Institutional Boilers and Process Heaters	Yes
EEEEE -- Iron and Steel Foundries	No
FFFFF -- Integrated Iron and Steel Manufacturing	No
GGGGG -- Site Remediation	No
HHHHH -- Miscellaneous Coating Manufacturing	No
IIIII -- Mercury Cell Chlor-Alkali Plants	No
JJJJJ -- Brick and Structural Clay Products Manufacturing	No
KKKKK -- Clay Ceramics Manufacturing	No
LLLLL -- Asphalt Processing and Asphalt Roofing Manufacturing	No
MMMMM -- Flexible Polyurethane Foam Fabrication Operations	No
NNNNN -- Hydrochloric Acid Production	No
PPPPP -- Engine Test Cells/Stands	No
QQQQQ -- Friction Materials Manufacturing	No
RRRRR -- Taconite Iron Ore Processing	No
SSSSS -- Refractory Products Manufacturing	No
TTTTT -- Primary Magnesium Refining	No
DDDDDD -- Polyvinyl Chloride and Copolymers Production Area Sources	No
EEEEEE -- Primary Copper Smelting Area Sources	No
FFFFFF -- Secondary Copper Smelting Area Sources	No
GGGGGG -- Primary Nonferrous Metals Area Sources – Zinc, Cadmium, and Beryllium	No
LLLLLL -- Acrylic and Modacrylic Fibers Production Area Sources	No
MMMMMM -- Carbon Black Production Area Sources	No
NNNNNN -- Chemical Manufacturing Area Sources: Chromium Compounds	No

Table 5 – Applicable and Non-Applicable National Emission Standards For Hazardous Air Pollutants For Source Categories (40 CFR Part 63)

Rule Description – 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories	Applicable? (Explanation Code)
OOOOOO -- Flexible Polyurethane Foam Production and Fabrication Area Sources	No
PPPPPP -- Lead Acid Battery Manufacturing Area Sources	No
QQQQQQ -- Wood Preserving Area Sources	No

Table 6
CAM Applicability Calculations
JR Simplot Don Siding Plant, Pocatello, ID

Source Group*	Control Device	Emission Factor Type	Pollutant[1]	Emission Factor (Permit Limit or Source Test Result)	Hours of Operation (hrs/yr)	Controlled Annual Emissions[2] (tons/year)	Conservative Control Efficiency (%)	Estimated Uncontrolled Emissions (tons/yr)	CAM Applicable? (Yes/No)
Ammonium Sulfate Plant	**Dryer Scrubber**	Source Test Average	PM	0.62 lb/hr (3)	8,760	--	90	27 (a)	No
		Maximum	PM	1.5 lb/hr (3)	8,760	--	90	66 (a)	
	Cooler Scrubber	Source Test Average	PM	0.69 lb/hr (3)	8,760	--	90	30 (a)	No
		Maximum	PM	2.13 lb/hr (3)	8,760	--	90	93 (a)	
Granulation 1	**Granulation No. 1 Baghouse**	Source Test Average	PM	0.26 lb/hr (3)	8,760	--	99.9	1,139 (a)	Yes
		Maximum	PM	0.51 lb/hr (3)	8,760	--	99.9	2,234 (a)	
	Reactor/Granulator Scrubber	Source Test Average	PM	0.70 lb/hr (3)	8,760	--	90	31 (a)	No
		Maximum	PM	1.26 lb/hr (3)	8,760	--	90	55 (a)	
	Dryer Scrubber	Source Test Average	PM	1.8 lb/hr (3)	8,760	--	90	79 (a)	Yes *(conservative assessment)*
		Maximum	PM	2.4 lb/hr (3)	8,760	--	90	105 (a)	
Granulation 2	**Granulation No. 2 Baghouse & Cooler Baghouse**	Source Test Average	PM	2.17 lb/hr (3)	8,760	--	99.9	9,505 (a)	Yes
		Maximum	PM	4.24 lb/hr (3)	8,760	--	99.9	18,571 (a)	
	Tailgas Scrubber	Source Test Average	PM	4.69 lb/hr (3)	8,760	--	90	205 (a)	Yes
		Maximum	PM	7.53 lb/hr (3)	8,760	--	90	330 (a)	
Granulation 3 [1]	**Entoleter Scrubber**	Source Test Average	PM	4.00 lb/hr (3)	8,760	--	90	175 (a)	Yes
		Maximum	PM	6.92 lb/hr (3)	8,760	30.7	90	307 (b)	
		Average	Fluorides	0.19 lb/hr (3)	8,760	--	90	8 (a)	Yes *(conservative assessment)*
		Maximum	Fluorides	0.27 lb/hr (3)	8,760	5.6	90	56 (b)	
	Defluorination Scrubber			Included above - no independent data available					Yes *(conservative assessment)*
	Baghouse		PM	Included above - no independent data available available					
Sulfuric Acid 300	**DynaWave scrubber followed by AmmSOx packed-bed ammonia scrubber**	Limit	H_2SO_4	3 lb/hr (2)	8760	13	98	650 (b)	Yes
		Inventory	PM	5.2 lb/hr (4)	8760	20.6	85	137 (b)	Yes

* Sources with pollutants subject to an emissions limitation or standard, that uses a control device to achieve compliance with the limitation or standard, and is not subject to a federal regulation issued after 1990. CAM will apply if uncontrolled emissions are above 100 tons/yr.

Notes:
(a) Uncontrolled emissions (tons/yr) = (source test results [lbs/hr]) x (hours of operation [hrs/yr]) / (1-(assumed control efficiency [%]/100)) / (2000 lbs/ton)
(b) Uncontrolled emissions (tons/yr) = (permit limit or emissions inventory controlled annual emissions [tons/yr]) x (1-(assumed control efficiency [%]/100))

References:
(1) If CAM is not applicable for PM based on uncontrolled emissions, then CAM is also not applicable for PM_{10}. If CAM is applicable for PM based on uncontrolled emissions, then CAM is assumed to be applicable to PM_{10} based on uncontrolled emissions; however, the CAM approach for PM_{10} is identical to the approach for PM.
(2) Permit limit from Simplot Tier 1 Permit No. T1-040313.
(3) Source test results, past three years.
(4) Calculated emissions from emissions inventory.

Attachment 2
Compliance Assurance Monitoring Plans

Compliance Assurance Monitoring Plan
Granulation 1 Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Polishing Screen, Fines Drag, Elevator to Granulator, Elevator to Screens, Reject Conveyor to Fines Drag
Emission Identification:	407.1, 411.1, 412.1, 413.1, 414.2
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	Tier I permit Condition 7.1, IDAPA 58.01.01.702, RACT
Emission Standard:	23.8 lb/hr, 104.26 tons/year PM limit from all sources venting to the Granulation No. 1 process stacks. 10.9 lb/hr, 47.7 tons/year PM limit from the Reactor/Granulator stack, Dryer stack and Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 7.2, RACT
Emission Standard:	19.52 lb/hr, 85.48 tons/year PM_{10} limit from all sources venting to the Granulation No. 1 process stacks. 10.9 lb/hr, 47.7 tons/year PM_{10} limit from the Reactor/Granulator stack, Dryer stack and Baghouse stack.
Monitoring Requirements:	Pressure drop across the baghouse and visible emissions observations.

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

Visible emissions were selected as a performance indicator because they are indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicates reduced performance of the control device.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for pressure drop using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the baghouse will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across the baghouse. Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test

or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The indicator range for visible emissions will be that no visible emissions are observed.

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range[(1)]
Granulation #1 - Baghouse Stack	Baghouse	PM/PM_{10}	Pressure Drop	1.0-10.0 in. H_2O
			Visible Emissions	No visible emissions

(1) Ranges provided by Simplot. Because ranges are updated as new data become available, they are not proposed as permit limits.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Pressure drop across the baghouse	Visible emissions
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	Visible emissions from the baghouse exhaust will be monitored daily using a see/no see evaluation procedure.
II. Indicator Range	An excursion is defined as a pressure drop less than 1.0 inches of water and greater than 10.0 inches of water. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined from historical data.	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and reporting requirements.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.	Measurements will be made at the emission point Granulation No. 1 baghouse stack.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.	The observer will be familiar with the see/no see procedure.
D. Monitoring Frequency	The pressure drop is monitored continuously.	A visible emissions observation will be performed daily.
E. Data Collection Procedure	At minimum, the pressure drop is manually recorded once per day.	The visible emissions observation is documented by the observer.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Granulation 1 Dryer Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	Dryer
Emission Identification:	400.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	IDAPA 58.01.01.702, Tier I permit Condition 7.1.1, RACT
Emission Standard:	If process weight (PW) is less than 17,000 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 17,000 lb/hr $E=1.12(PW)^{0.27}$ 23.8 lb/hr, 104.26 tons/year PM limit from all sources venting to the Granulation No. 1 process stacks. 10.9 lb/hr, 47.7 tons/year PM limit from the Reactor/Granulator stack, Dryer stack and Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 7.2, RACT
Emission Standard:	19.52 lb/hr, 85.48 tons/year PM_{10} limit from all sources venting to the Granulation No. 1 process stacks. 10.9 lb/hr, 47.7 tons/year PM_{10} limit from the Reactor/Granulator stack, Dryer stack and Baghouse stack.
Monitoring Requirements:	Pressure drop across the scrubber and liquid flow rate through the scrubber

C. Capture and Control Technology

Wet Scrubber - Dryer Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occurred. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for indicator levels using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the scrubber and the flow rate of the scrubbing liquid to the scrubber will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across and of the flow rate of the scrubbing liquid of the scrubber . Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will

be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range[(1)]
Granulation #1 Dryer Stack	Dryer Scrubber	PM/PM_{10}	Scrubber Liquid Flow	267-400 gal/min
			Pressure Drop	2.74-11.5 in. H_2O

(1) Ranges provided by Simplot. These ranges will be updated based on ongoing source testing, and are not to be considered permit limits.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with a flow meter.
II. Indicator Range	An excursion is defined as a pressure drop less than 2.74 inches of water and greater than 11.5 inches of water. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined by values recorded during previous performance tests.	An excursion is defined as a water flow rate less than 267 gallons per minute and greater than 400 gallons per minute. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined by values recorded during previous performance tests.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	At a minimum, the differential pressure will be manually recorded once per day.	At a minimum, the liquid flow rate will be manually recorded once per day.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Granulation 2 Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Recycle Drag Conveyor, Screens, Polishing Screen, Elevator to Granulator, Elevator to Screens, Product Elevator
Emission Identification:	461.1, 464.1, 464.2, 465.1, 466.1, 467.1
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	Tier I permit Condition 8.1, IDAPA 58.01.01.702, RACT
Emission Standard:	If process weight (PW) is less than 17,000 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 17,000 lb/hr $E=1.12(PW)^{0.27}$ 22.02 lb/hr, 96.47 tons/year PM limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM limit from the Tailgas scrubber stack and the Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 8.2, RACT
Emission Standard:	18.06 lb/hr, 79.12 tons/year PM_{10} limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM_{10} limit from the Tailgas scrubber stack and the Baghouse stack.
Monitoring Requirements:	Pressure drop across the baghouse and visible emissions observations.

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

Visible emissions were selected as a performance indicator because they are indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicates reduced performance of the control device.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for pressure drop using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the baghouse will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across the baghouse. Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and

processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The indicator range for visible emissions will be that no visible emissions are observed.

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range(1)
Granulation #2 – Baghouse Vent Stack	Baghouse	PM/PM_{10}	Pressure Drop	1.0-25.0 in. H_2O
			Visible Emissions	No visible emissions

(1) Ranges provided by Simplot. Because ranges are updated as new data become available, they are not proposed as permit limits.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Pressure drop across the baghouse	Visible emissions
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	Visible emissions from the baghouse exhaust will be monitored daily using a see/no see evaluation procedure.
II. Indicator Range	An excursion is defined as a pressure drop less than 1.0 inches of water and greater than 25.0 inches of water. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined from historical data.	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and reporting requirements.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.	Measurements will be made at the emission point Granulation No. 2 baghouse stack.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.	The observer will be familiar with the see/no see procedure.
D. Monitoring Frequency	The pressure drop is monitored continuously.	A visible emissions observation will be performed daily.
E. Data Collection Procedure	At a minimum, the pressure drop is manually recorded once per day.	The visible emissions observation is documented by the observer.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Granulation 2 Cooler Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Cooler
Emission Identification:	470.3
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	Tier I permit Condition 8.1, IDAPA 58.01.01.702, RACT
Emission Standard:	If process weight (PW) is less than 17,000 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 17,000 lb/hr $E=1.12(PW)^{0.27}$ 22.02 lb/hr, 96.47 tons/year PM limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM limit from the Tailgas scrubber stack and the Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 8.2, RACT
Emission Standard:	18.06 lb/hr, 79.12 tons/year PM_{10} limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM_{10} limit from the Tailgas scrubber stack and the Baghouse stack.
Monitoring Requirements:	Pressure drop across the baghouse and visible emissions observations.

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

Visible emissions were selected as a performance indicator because they are indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicates reduced performance of the control device.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for pressure drop using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the baghouse will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across the baghouse. Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and

processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The indicator range for visible emissions will be that no visible emissions are observed.

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range
Granulation #2 – Cooler Baghouse Vent Stack	Baghouse	PM/PM_{10}	Pressure Drop	To be established
			Visible Emissions	No visible emissions

The baseline pressure differential will need to be established to determine appropriate indicator ranges as discussed above. If the pressure drop falls outside the selected ranges, Simplot will initiate corrective action to restore the baghouse pressure drop.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Pressure drop across the baghouse	Visible emissions
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	Visible emissions from the baghouse exhaust will be monitored daily using a see/no see evaluation procedure.
II. Indicator Range	The baseline pressure drop will need to be established. Excursions trigger an inspection, corrective action and reporting requirement.	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and reporting requirements.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.	Measurements will be made at the emission point Granulation No. 2 baghouse stack.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.	The observer will be familiar with the see/no see procedure.
D. Monitoring Frequency	The pressure drop is monitored continuously.	A visible emissions observation will be performed daily.
E. Data Collection Procedure	At a minimum, the pressure drop is manually recorded once per day.	The visible emissions observation is documented by the observer.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Granulation 2 Tail Gas Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	Reactor, Granulator and Dryer
Emission Identification:	450.0, 451.0, and 453.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	IDAPA 58.01.01.702, Tier I permit Condition 8.1.1, RACT
Emission Standard:	If process weight (PW) is less than 17,000 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 17,000 lb/hr $E=1.12(PW)^{0.27}$ 22.02 lb/hr, 96.47 tons/year PM limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM limit from the Tailgas scrubber stack and the Baghouse stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 8.2, RACT
Emission Standard:	18.06 lb/hr, 79.12 tons/year PM_{10} limit from all sources venting to the Granulation No. 2 process stacks. 10.7 lb/hr, 46.9 ton/year PM_{10} limit from the Tailgas scrubber stack and the Baghouse stack.
Monitoring Requirements:	Pressure drop across the scrubber and liquid flow rate through the scrubber

C. Capture and Control Technology

Wet Scrubber - Dryer Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occurred. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for indicator levels using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the scrubber and the flow rate of the scrubbing liquid to the scrubber will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across and of the flow rate of the scrubbing liquid of the scrubber. Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will

be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range[1]
Granulation #2 Tailgas Scrubber Stack	Tailgas Scrubber	PM/PM_{10}	Scrubber Liquid Flow	507-760 gal/min
			Pressure Drop	0.3-1.51 in. H_2O

(1) Ranges provided by Simplot. These ranges will be updated based on ongoing source testing, and are not to be considered permit limits.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with a flow meter.
II. Indicator Range	An excursion is defined as a pressure drop less than 0.3 inches of water and greater than 1.51 inches of water. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined by values recorded during previous performance tests.	An excursion is defined as a water flow rate less than 507 gallons per minute and greater than 760 gallons per minute. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined by values recorded during previous performance tests.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	At a minimum, the differential pressure will be manually recorded once per day.	At a minimum, the liquid flow rate will be manually recorded once per day.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Granulation 3 Baghouse

I. Background

A. Emission Unit

Process Emission Unit:	Screens, Rotex Screen, Fines Loadout, Production elevator, Reject Elevator
Emission Identification:	708.2, 708.3, 709.1, 710.1, 712.1
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter (PM)
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 9.1
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$
	If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$
	7.0 lb/hr, 30.7 tons/year PM limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 9.2.1
Emission Standard:	5.7 lb/hr, 25.0 tons/year PM_{10} limit from all sources venting to the Granulation No. 3 stack.
Monitoring Requirements:	Pressure drop across the baghouse and visible emissions observations.

C. Capture and Control Technology

Baghouse

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The pressure drop across the baghouse was selected as a performance indicator since, in general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in the operation that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

Visible emissions were selected as a performance indicator because they are indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicates reduced performance of the control device.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for pressure drop using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the baghouse will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across the baghouse. Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test

or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The indicator range for visible emissions will be that no visible emissions are observed.

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range[(1)]
Granulation #3 Stack	Baghouse	PM/PM_{10}	Pressure Drop	1.0-12.0 in. H_2O
			Visible Emissions	No visible emissions

(1) Ranges provided by Simplot. Because ranges are updated as new data become available, they are not proposed as permit limits.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Pressure drop across the baghouse	Visible emissions
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	Visible emissions from the baghouse exhaust will be monitored daily using a see/no see evaluation procedure.
II. Indicator Range	An excursion is defined as a pressure drop less than 1.0 inches of water and greater than 12.0 inches of water. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined from historical data.	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and reporting requirements.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of pressure taps located at the baghouse inlet and outlet.	Measurements will be made at the emission point Granulation No. 3 stack.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The pressure gauge is calibrated. Pressure taps are checked for plugging.	The observer will be familiar with the see/no see procedure.
D. Monitoring Frequency	The pressure drop is monitored continuously.	A visible emissions observation will be performed daily.
E. Data Collection Procedure	At a minimum, the pressure drop is manually recorded once per day.	The visible emissions observation is documented by the observer.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Granulation 3 Entoleter Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	Granulation 3 Mixer, Blunger, and Dryer
Emission Identification:	700.0, 703.0, 720.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 9.1
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$ 7.0 lb/hr, 30.7 tons/year PM limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 9.2.1
Emission Standard:	5.7 lb/hr, 25.0 tons/year PM_{10} limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Fluorides
Regulation Number:	Tier I permit Condition 9.3
Emission Standard:	1.28 lb/hr, 5.63 tons/year fluoride limit from all sources venting to the Granulation No. 3 stack
Monitoring Requirements:	Pressure drop across the scrubber, liquid flow rate through the scrubber, fresh water flow to the scrubber, and scrubber duct spray water flow.

C. Capture and Control Technology

Wet Scrubber - Entoleter Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occurred. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

Additionally, the April 13, 2007 Granulation No. 3 Consent Order (for Case No. E-040018 and E-050002) specifies additional performance indicator provisions for the Entoleter Scubber. These include requirements that the fresh water flow to the scrubber does not drop below 10 gallons per minute (gpm) while producing 21P and 18.5P, fresh water flow to the scrubber does not drop below 32 gpm while producing 0-45-0, the total scrubber flow does not drop below 600 gpm, and the scrubber duct spray water flow does not drop below 250 gpm. All monitoring data will be determined based upon daily averaging of data collected during operations on approximately four hour intervals. These requirements have also been included in the CAM plan.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for indicator levels using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the scrubber and the flow rate of the scrubbing liquid to the scrubber will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across and of the flow rate of the scrubbing liquid of the scrubber. Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The selected indicator ranges are provided below. If the monitored indicator falls outside the selected range, Simplot will initial corrective action to restore the indicator to within the acceptable range.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range
Granulation #3 Stack	Entoleter Scrubber	PM/PM_{10}/Fluorides	Scrubber Liquid Flow	600-800 gal/min (2)
			Scrubber Liquid Flow	Above 600 gal/min (1)
			21P and 18.5P Fresh Water Flow	Above 10 gal/min (1)
			0-45-0 Fresh Water Flow	Above 32 gal/min (1)
			Duct Spray Water Flow	Above 250 gal/min (1)
			Pressure Drop	5.0-25.0 in. H_2O (2)

(1) Ranges taken from the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order.

(2) Ranges provided by Simplot. These ranges will be updated based on ongoing source testing, and are not to be considered permit limits.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with a flow meter.
II. Indicator Range	An excursion is defined as a pressure drop less than 5.0 inches of water and greater than 25.0 inches of water. Excursions trigger an inspection, corrective action and reporting requirement. Allowable indicator ranges were determined from historical data.	An excursion is defined as a water flow rate less than 600 gallons per minute, as required by the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order, or above 800 gallons per minute, determined by historical data. Excursions trigger an inspection, corrective action and reporting requirement.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	The differential pressure is manually recorded once per day.	The liquid flow rate is manually recorded every four hours.
F. Averaging Period	None	Daily average

	Indicator No. 3	Indicator No. 4
IV. Indicator	Fresh water flow to the scrubber	Scrubber duct spray water flow
Measurement Approach	The fresh water flow rate is monitored with flow meter.	The liquid flow rate is monitored with flow meter.
V. Indicator Range	An excursion is defined as fresh water flow less than 10 gallons per minute while producing 21 P and 18.5 P, and less than 32 gallons per minute while producing 0-45-0, as required by the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order. Excursions trigger an inspection, corrective action and reporting requirement.	An excursion is defined as a duct spray water flow rate less than 250 gallons per minute, as required by the April 13, 2007 Granulation No. 3/Cooling Tower Consent Order. Excursions trigger an inspection, corrective action and reporting requirement.
VI. Performance Criteria A. Data Representativeness	A liquid flow meter is used to monitor the fresh water flow rate.	A liquid flow meter is used to monitor the duct spray flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The flow meter will be calibrated.	The flow meter will be calibrated.
D. Monitoring Frequency	The fresh water flow is monitored continuously.	The scrubber duct spray water flow is monitored continuously.
E. Data Collection Procedure	The fresh water flow is manually recorded every four hours.	The scrubber duct spray water flow is manually recorded every four hours.
F. Averaging Period	Daily average	Daily average

Compliance Assurance Monitoring Plan
Granulation 3 Defluorination Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	Defluorination reactors
Emission Identification:	725.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Particulate Matter
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 9.1
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$ 7.0 lb/hr, 30.7 tons/year PM limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	Tier I permit Condition 9.2.1
Emission Standard:	5.7 lb/hr, 25.0 tons/year PM_{10} limit from all sources venting to the Granulation No. 3 stack.
Pollutant:	Fluorides
Regulation Number:	Tier I permit Condition 9.3
Emission Standard:	1.28 lb/hr, 5.63 tons/year fluoride limit from all sources venting to the Granulation No. 3 stack
Monitoring Requirements:	Pressure drop across the scrubber and liquid flow rate through the scrubber

C. Capture and Control Technology

Wet Scrubber - Defluorination Scrubber

II. Monitoring Approach

The key elements of the monitoring approach for particulate matter and fluorides, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

The differential pressure across the scrubber was selected as a performance indicator since it indicates the water level in the scrubber. Maintaining an adequate water flow insures adequate particulate removal. A high pressure drop indicates that water level in the scrubber is too high or blockage has occurred. Usually, high water level problems are caused by a malfunction of the scrubber water level controller. A low pressure drop is caused by a loss of water in the scrubber.

The scrubber liquid flow rate will indicate adequate liquid flow through the scrubber.

B. Rationale for Selection of Indicator Levels

Simplot will establish allowable ranges for indicator levels using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range of the pressure drop across the scrubber and the flow rate of the scrubbing liquid to the scrubber will be ±20 percent of the baseline average. The baseline average will be determined during source testing required in the Tier I permit. The arithmetic averages obtained during the three source test runs shall be used as the baseline average values. Simplot will notify IDEQ of the baseline average value and will notify the IDEQ each time the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) Simplot shall establish and provide to IDEQ for approval, allowable ranges for the pressure drop across and of the flow rate of the scrubbing liquid of the scrubber . Allowable ranges may be based upon baseline average values recorded during previous performance tests required in the Tier I permit. As an alternative, Simplot can establish allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in the Tier I permit. Simplot shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to IDEQ for approval. When a source using the methodology of this paragraph is retested, Simplot shall determine whether new allowable ranges of baseline values will

be based upon the performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retesting and test results are submitted to the IDEQ, Simplot will indicate whether the operating range will be based on the new performance test or the previously established range. If IDEQ has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

Note that Simplot may choose to use one method to determine the lower end of the parameter range and the other method to choose the upper end of the parameter range: i.e. the lower end of the allowable range shall be the lesser of the average values measured during compliant test(s) minus 20%, or the lowest value measured during compliant test(s), and the upper end of the allowable range shall be the greater of the average values measured during compliant test(s) plus 20%, or the highest value measured during compliant test(s).

The selected indicator ranges are provided below.

Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range
Granulation #3 Stack	Defluorination Scrubber	PM/PM_{10}/Fluorides	Pressure Drop	To be established
			Scrubber Liquid Flow	To be established

The baseline pressure differential and scrubber liquid flow rate will need to be established to determine appropriate indicator ranges as discussed above. If the scrubber liquid flow or pressure drop falls outside the selected ranges, Simplot will initiate corrective action to restore the scrubber flow rate through the scrubber or pressure drop across the scrubber.

TABLE A. MONITORING APPROACH

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential pressure across the wet scrubber	Liquid flow rate through the wet scrubber
Measurement Approach	The pressure drop is monitored with a differential pressure gauge.	The liquid flow rate is monitored with a flow meter.
II. Indicator Range	The baseline pressure differential will need to be established. It will be determined by measurements taken concurrent with emissions tests and/or historical plant records. Excursions trigger an inspection, corrective action and reporting requirement.	The baseline scrubber liquid flow rate will need to be established. It will be determined by measurements taken concurrent with emissions tests and/or historical plant records. Excursions trigger an inspection, corrective action and reporting requirement.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a differential pressure gauge which compares the pressure in the duct upstream of the water spray to the atmospheric pressure.	A liquid flow meter is used to monitor the liquid flow rate.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Calibrated on initial installation.	The flow meter will be calibrated.
D. Monitoring Frequency	The differential pressure is monitored continuously.	The liquid flow rate is monitored continuously.
E. Data Collection Procedure	At a minimum, the differential pressure will be manually recorded once per day.	At a minimum, the liquid flow rate will be manually recorded once per day.
F. Averaging Period	None	None

Compliance Assurance Monitoring Plan
Sulfuric Acid Plant No. 300 AmmSOx Scrubber

I. Background

A. Emission Unit

Process Emission Unit:	#300 Sulfuric Acid Plant
Emission Identification:	100.0
Source/Facility:	J.R. Simplot Co. – Don Siding Plant
Permit Number:	T1-040313

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Pollutant:	Sulfuric Acid Mist
Regulation Number:	40 CFR 60.83(1), Tier I permit Condition 16.2
Emission Standard:	3.0 lb/hr (calculated as 24 hour rolling average), 13.0 tons/year, 0.15 lbs/ton of 100% sulfuric acid produced
Pollutant:	Particulate Matter (PM)
Regulation Number:	IDAPA 58.01.01.701, Tier I permit Condition 16.3.2
Emission Standard:	If process weight (PW) is less than 9,250 lb/hr $E=0.045(PW)^{0.60}$ If process weight (PW) is greater than 9,250 lb/hr $E=1.10(PW)^{0.25}$
Pollutant:	Particulate Matter with an aerodynamic diameter less than 10 micrometers (PM_{10})
Regulation Number:	RACT limits
Emission Standard:	CAM currently does not apply to PM_{10}, since PM_{10} limits have not been set. CAM will apply in the future when performance testing has been completed. The CAM monitoring requirements will be the same as for particulate matter.
Monitoring Requirements:	SO_2 emission rate from the continuous emissions monitoring system and periodic inspection of the mist eliminators.

C. Capture and Control Technology

Wet Scrubber - AmmSOx Scrubber and Mist Eliminators

II. Monitoring Approach

The key elements of the monitoring approach for sulfuric acid mist and particulate matter, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.

III. Justification

A. Rationale for Selection of Performance Indicators

Sulfuric acid mist emissions are primarily determined by the presence of the mist eliminators.

The mist eliminators require little maintenance and no continuous compliance indicators could be determined; therefore, only periodic inspections of the mist eliminators are being proposed (every two years, which is the planned maintenance schedule for the plant).

The AmmSOx scrubber is primarily designed to control SO_2 emissions from the process, but also has a role in controlling PM emissions.

Due to the harsh chemical environment in the AmmSOx scrubber, it would be difficult to install monitoring equipment to measure the scrubber liquid circulation rate. Simplot believes that the best indicator of proper scrubber performance is the SO_2 emission rate, as measured by the SO_2 continuous emissions monitoring system (CEMS).

Based on recent source test data, the measured SO_2 emissions from the Sulfuric Acid Plant No. 300 represent approximately 60% of the SO_2 pound per hour emission limit on average. This compares to measured PM emissions averaging approximately 20% of the PM pound per hour emission limit. Thus, it is reasonable to expect that if the AmmSOx scrubber efficiency were to degrade, the SO_2 pound per hour limit would be exceeded well before the PM limit.

Based on this information, the SO_2 CEMS is proposed as the continuous compliance indicator for PM for the AmmSOx scrubber and the indicator range would be for SO_2 emissions to be less than the SO_2 pound per hour limit.

B. Rationale for Selection of Indicator Levels

The selected indicator range is provided below.

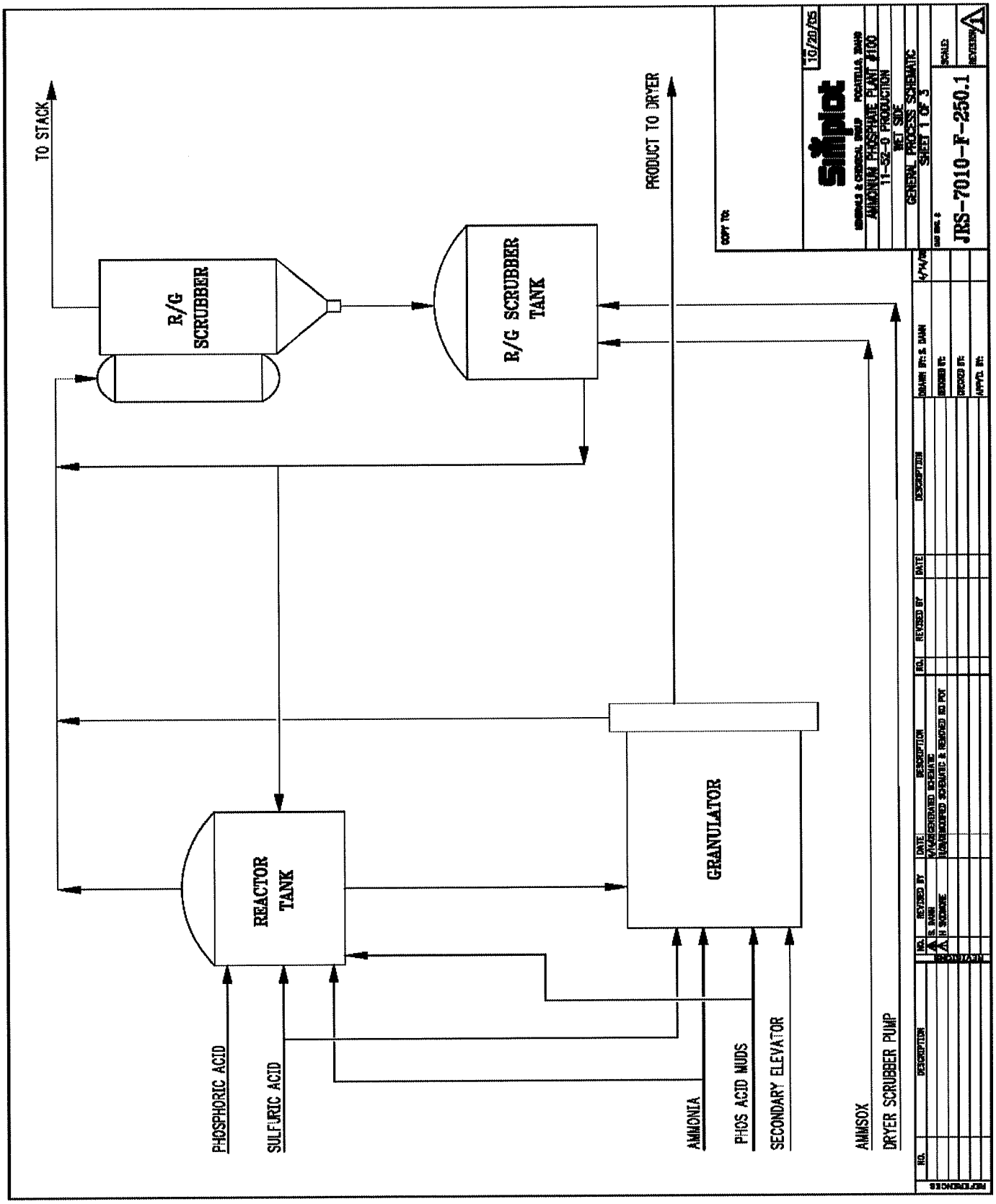
Emission Source	Control Device	Pollutant(s) Controlled	Proposed Indicator	Proposed Indicator Range
#300 Sulfuric Acid Plant	AmmSOx Scrubber/ Mist Eliminators	PM/Sulfuric Acid Mist	SO_2 emissions	170 lb/hr (three hour average)
			Mist Eliminator Operation	Inspection (every 2 years)

TABLE A. MONITORING APPROACH

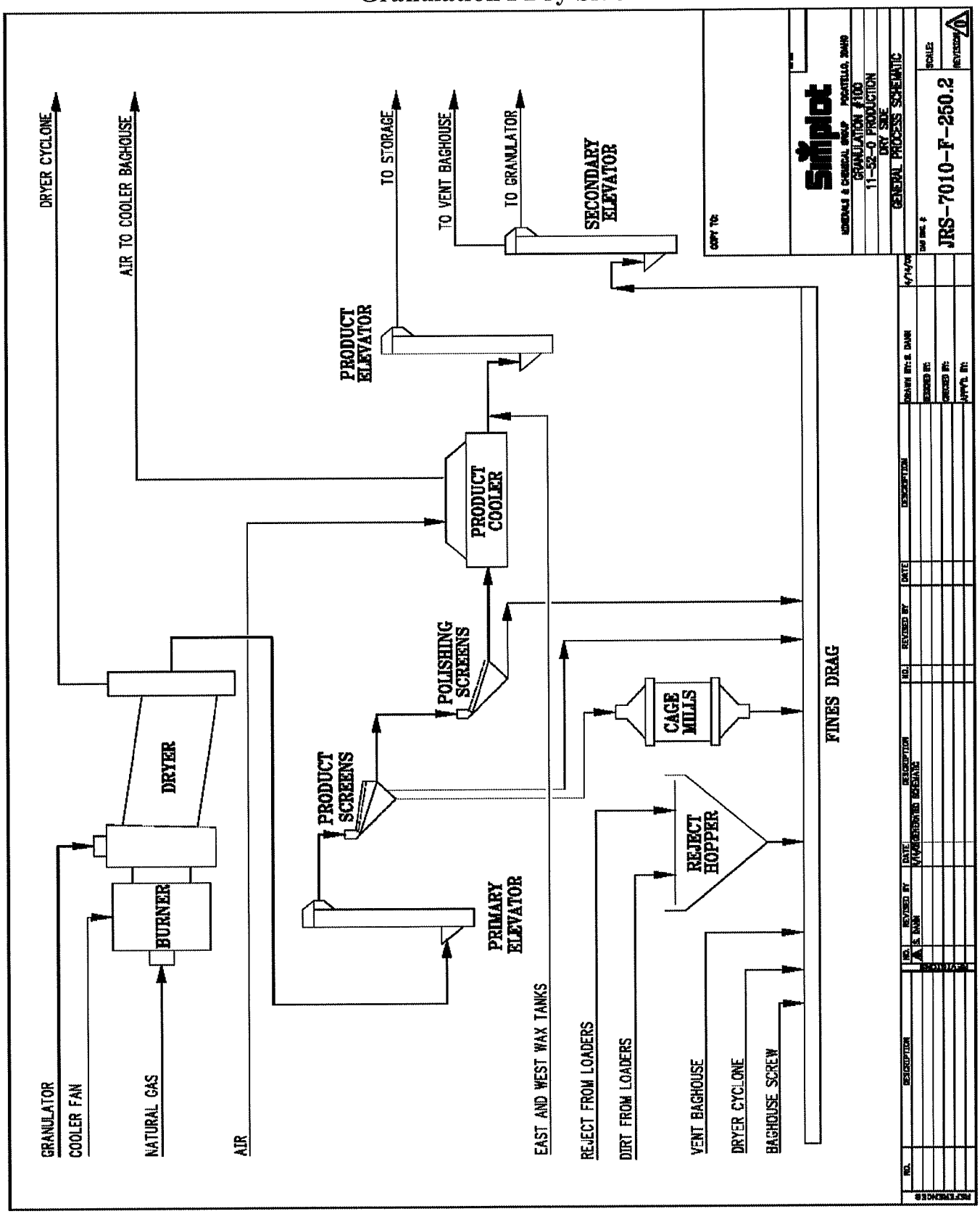
	Indicator No. 1	Indicator No. 2
I. Indicator	SO_2 emission rate	Mist eliminator operation
Measurement Approach	The SO_2 emission rate is measured by the SO_2 continuous emissions monitoring system (CEMS).	Mist eliminator inspection every two years.
II. Indicator Range	The indicator range will be the current Tier I permit SO_2 pound per hour emission limit of 170 lbs/hr, calculated as a three-hour rolling average. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as the discovery of failure or degradation of the mist eliminator structure or excessive clogging. Excursions trigger an inspection, corrective action, and a reporting requirement.
III. Performance Criteria A. Data Representativeness	A CEMS is used to monitor the SO_2 emission rate.	The mist eliminators will be visually inspected for deterioration.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The CEMS is calibrated as required by 40 CFR 60.13(d).	Trained personnel will perform the inspections.
D. Monitoring Frequency	The SO_2 emission rate is monitored continuously.	The inspections will be performed every two years.
E. Data Collection Procedure	The SO_2 emission rate is recorded every 15 minutes.	The mist eliminator inspections will be recorded manually when performed.
F. Averaging Period	Three hour rolling averaging periods.	None

Attachment 3
Process Flow Diagrams

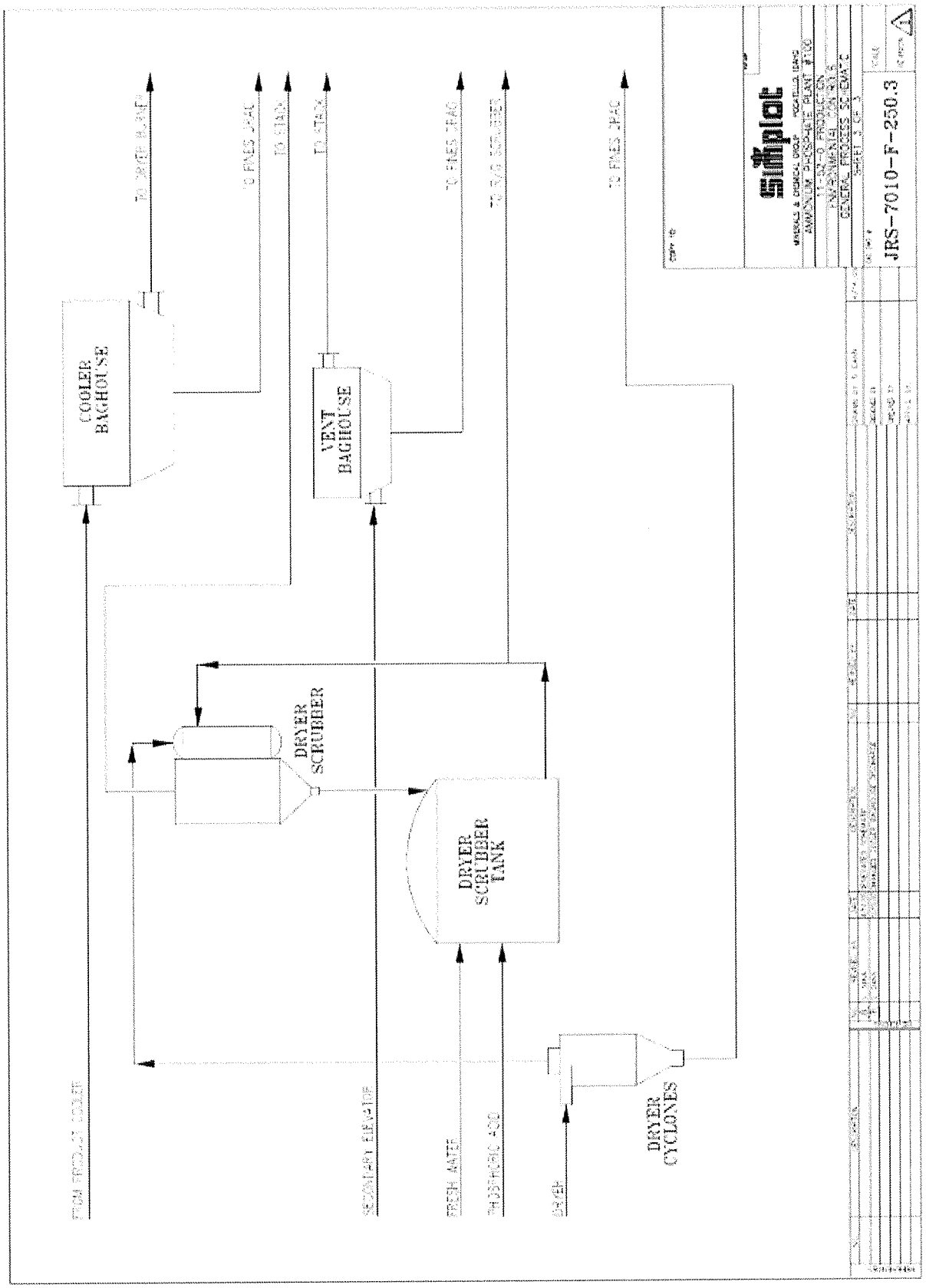
Granulation I Wet Side



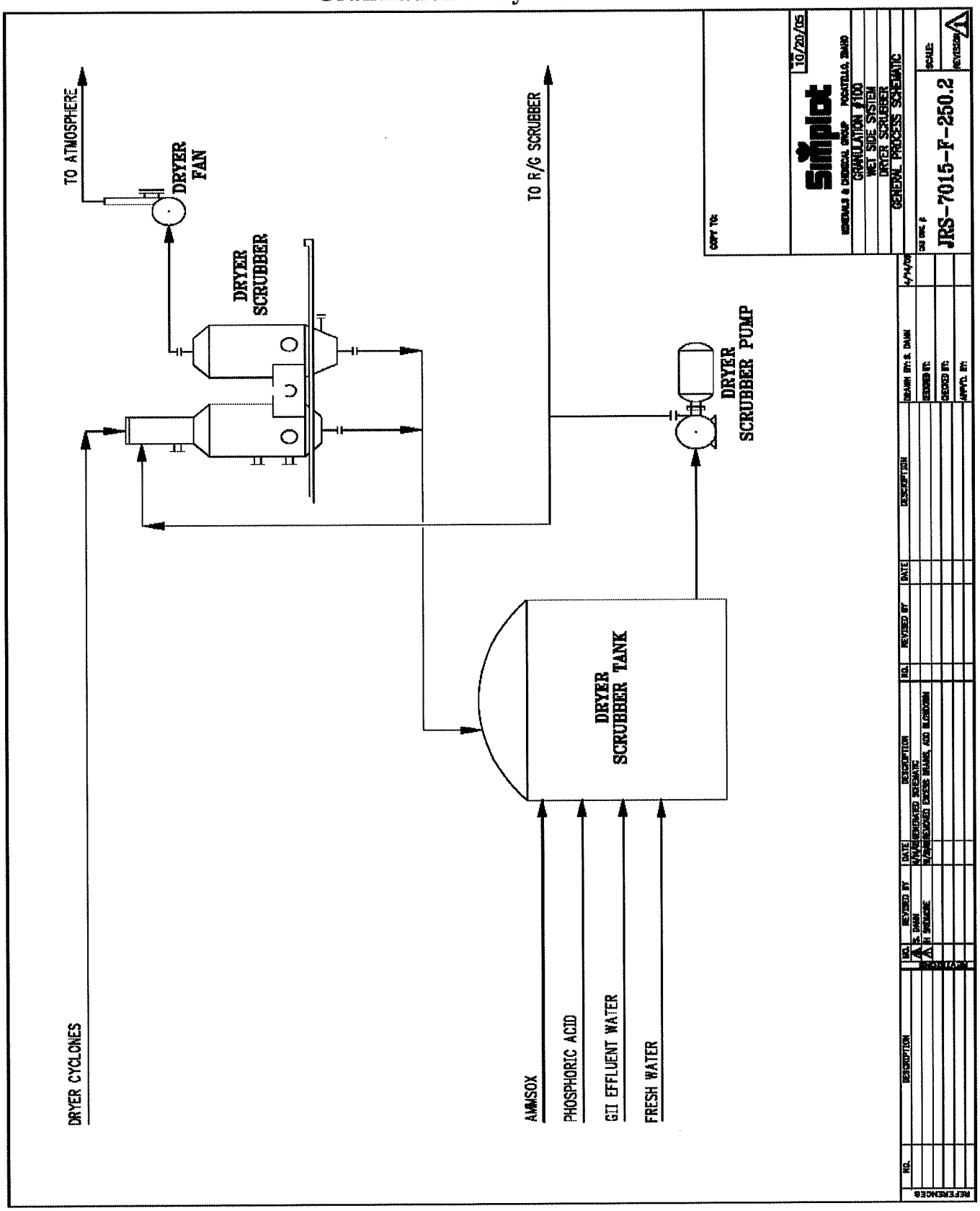
Granulation I Dry Side



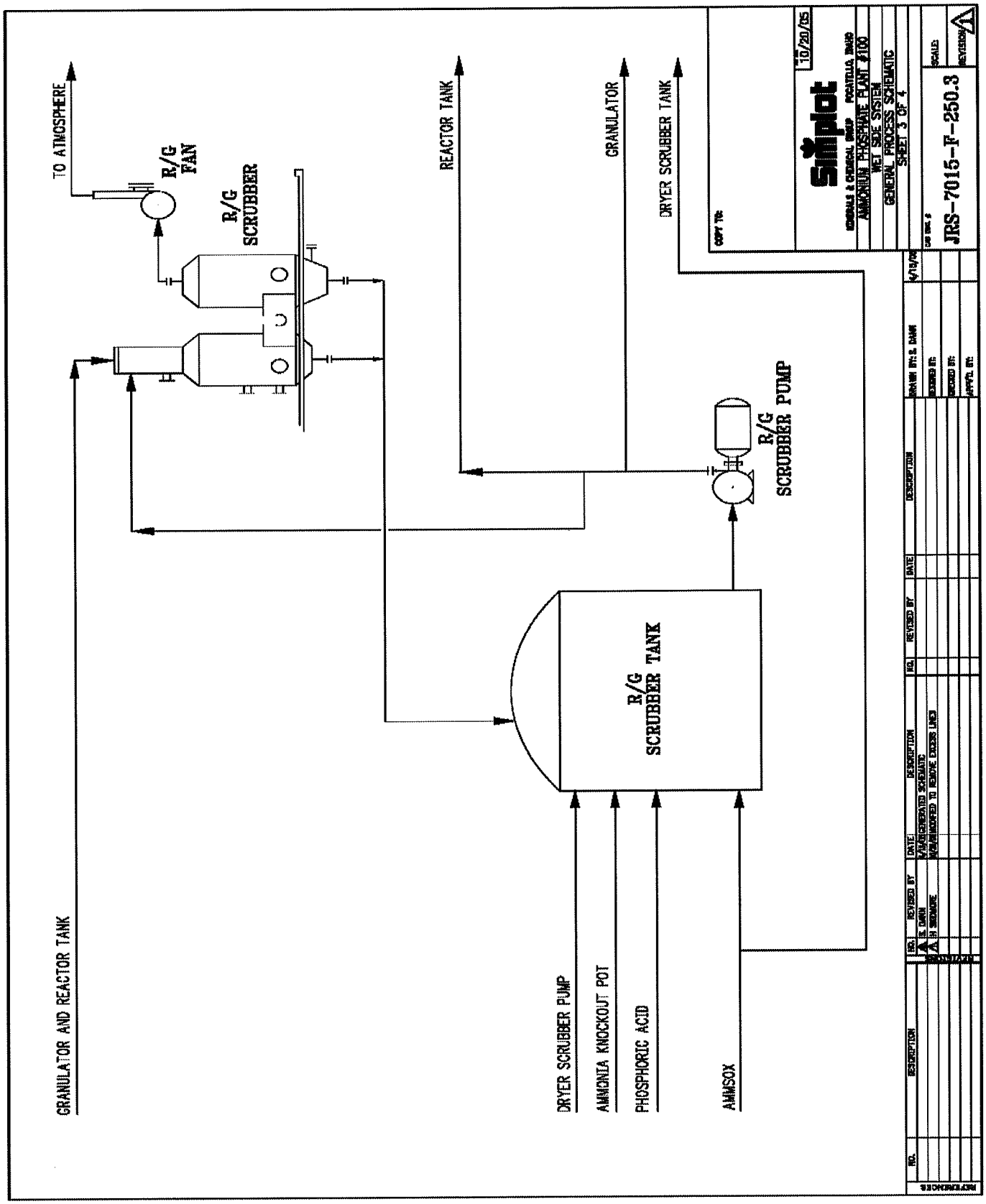
Granulation I Environmental Controls



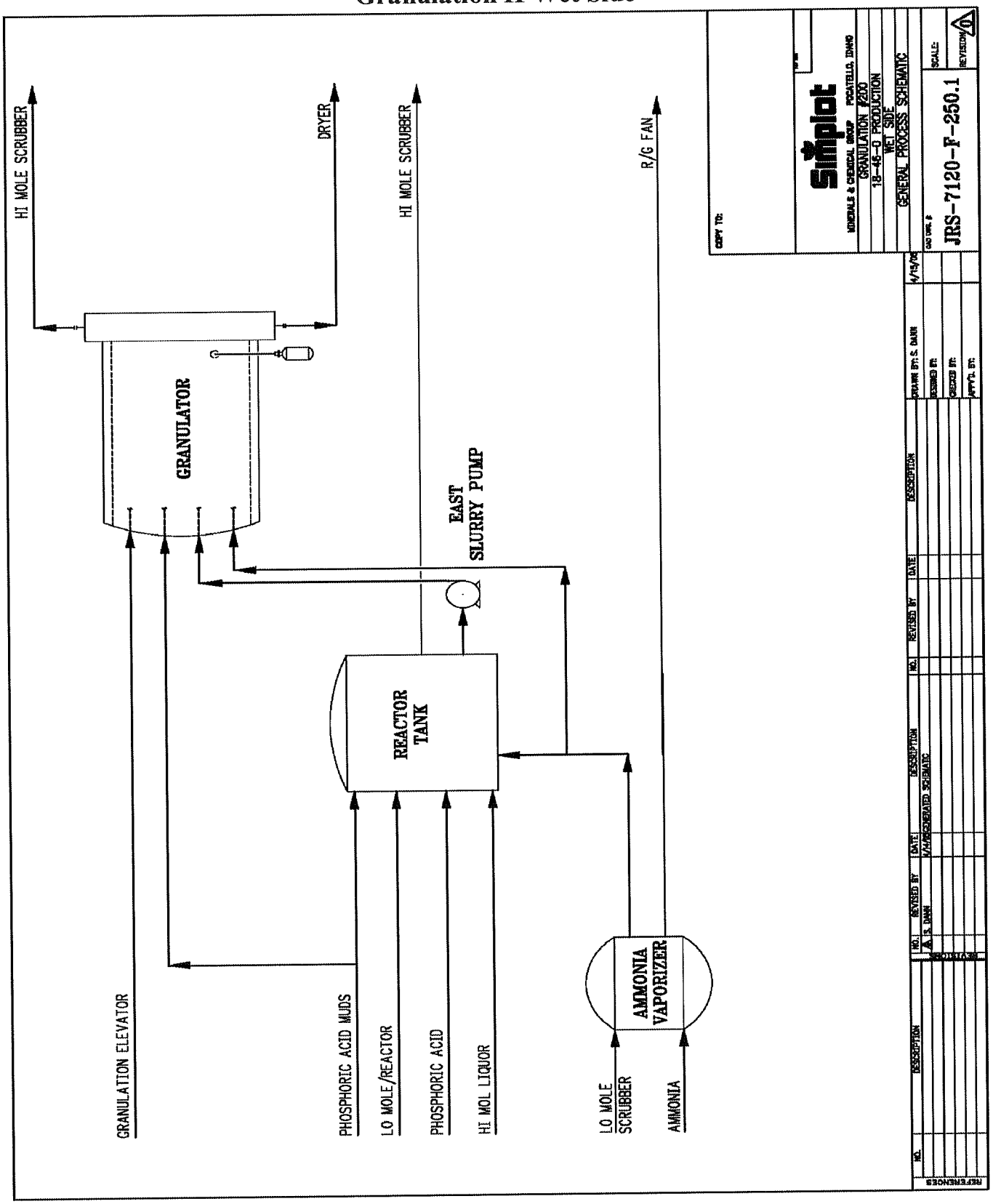
Granulation I Dryer Scrubber



Granulation I R/G Scrubber



Granulation II Wet Side



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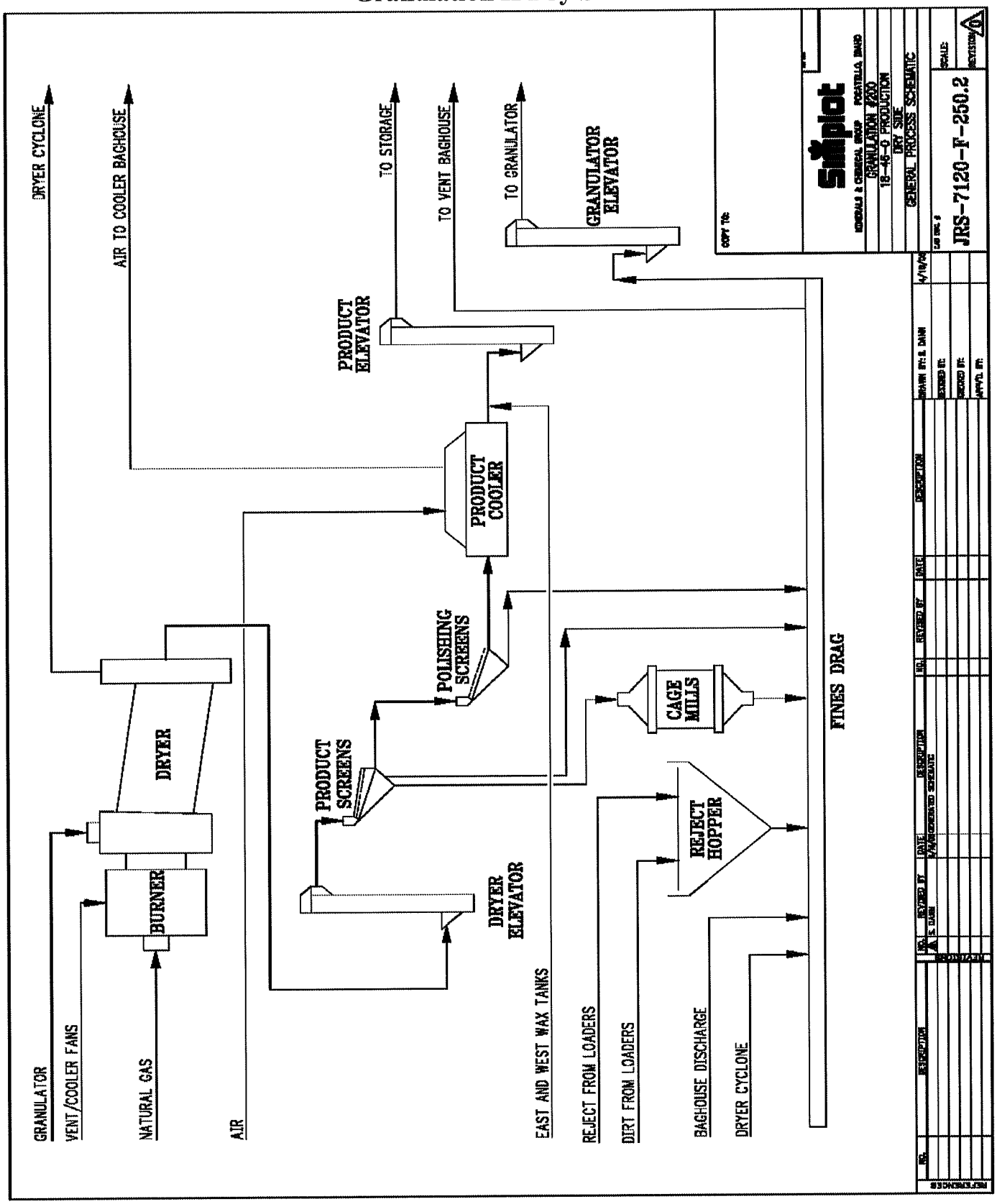
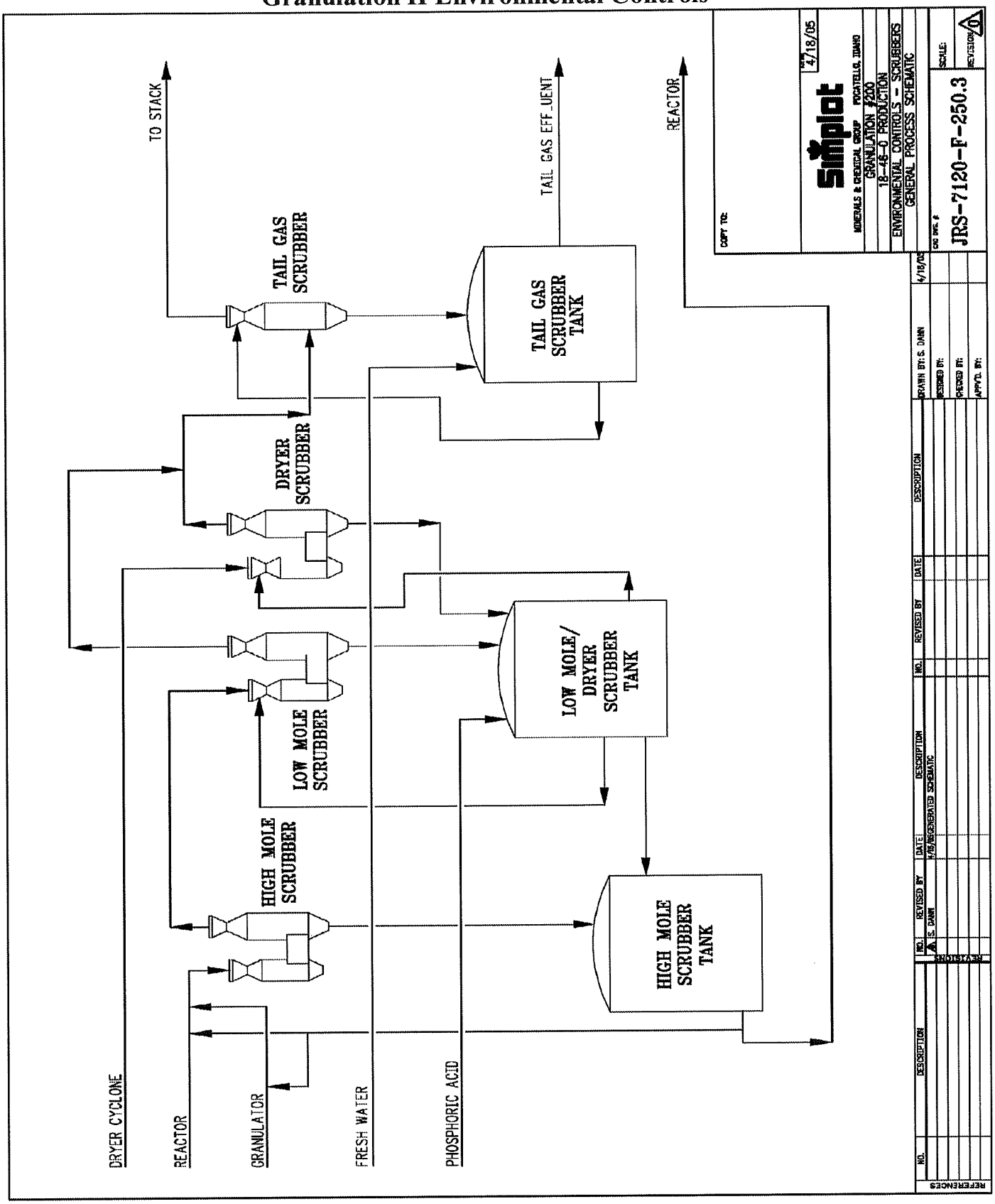
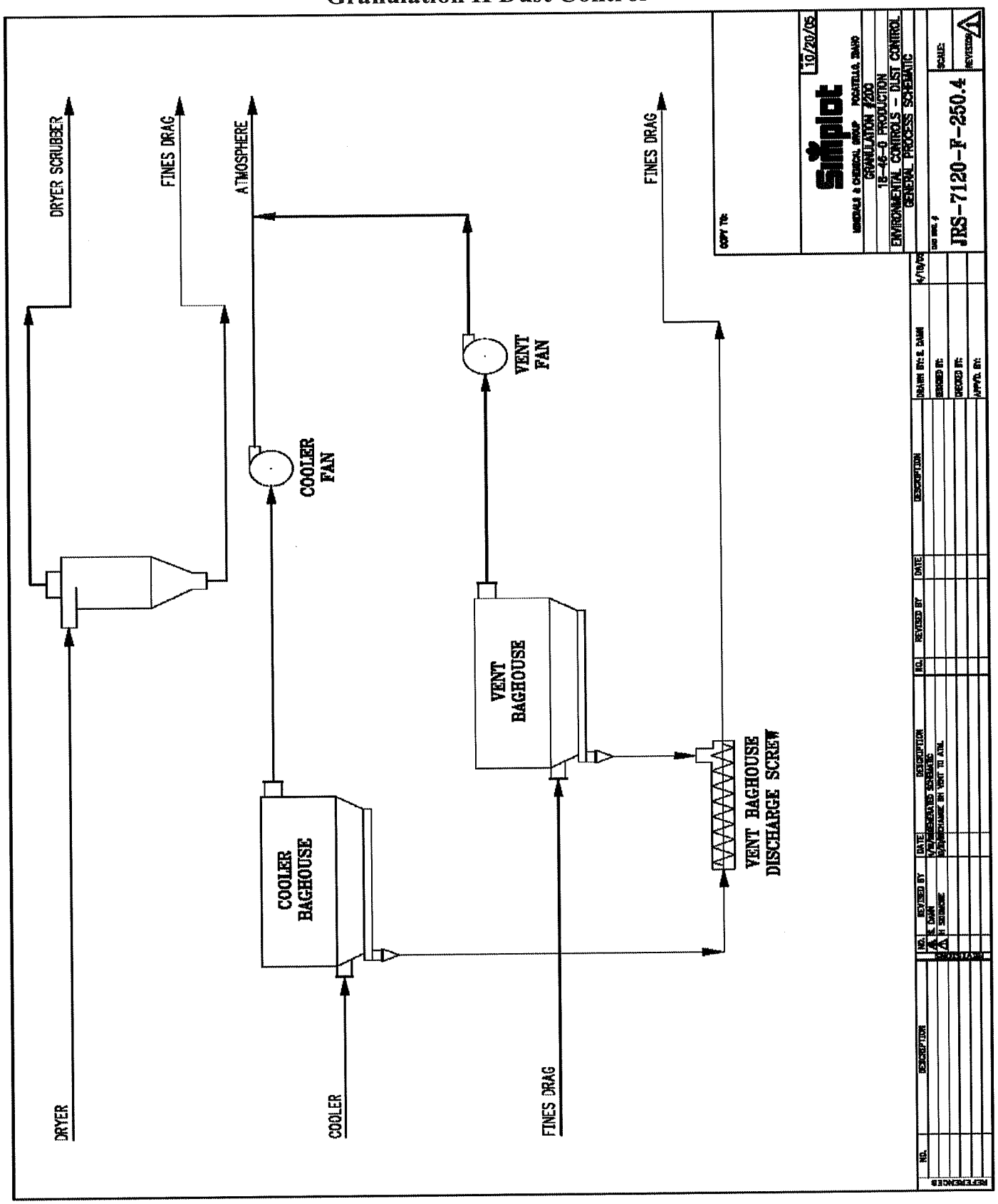


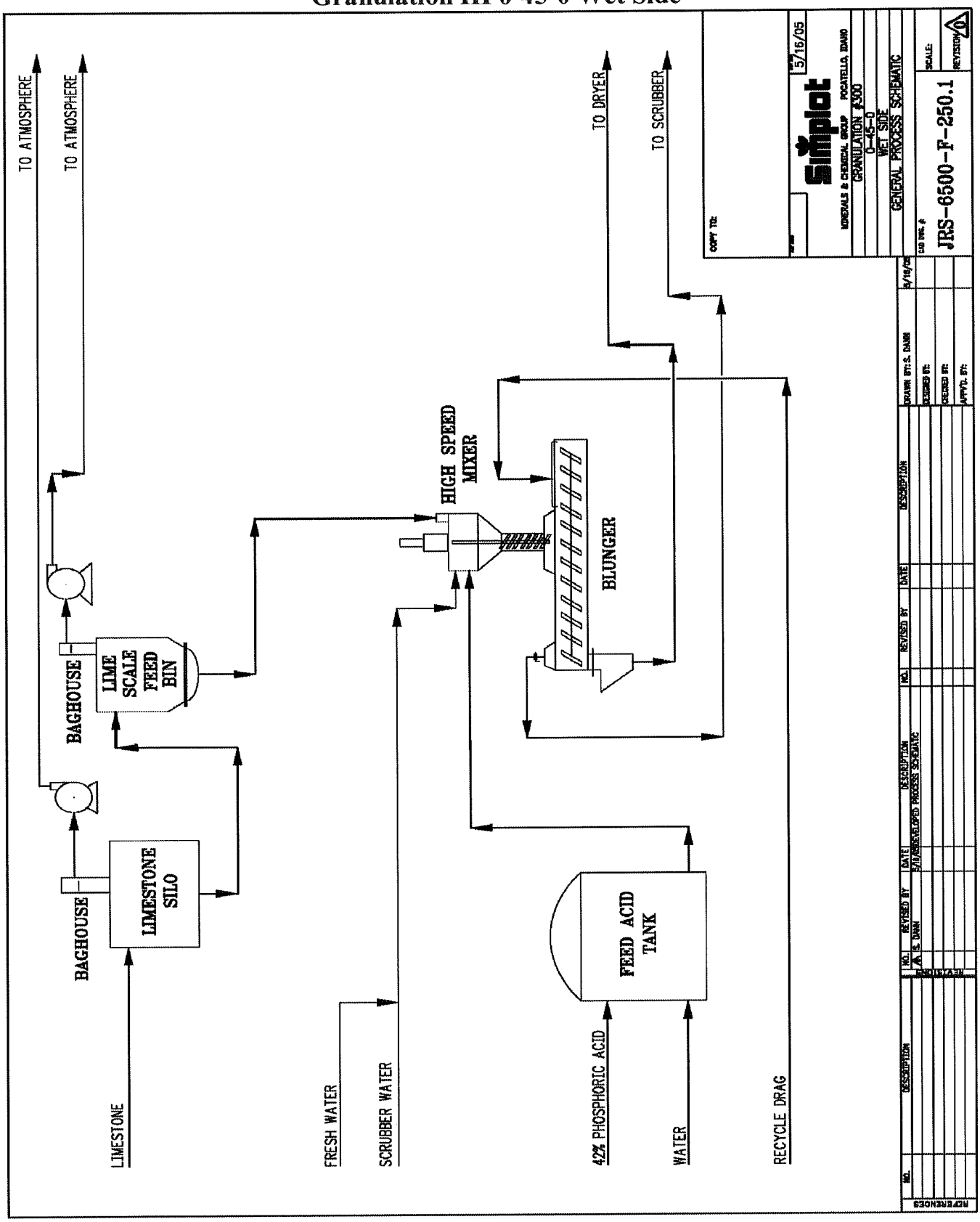
Granulation II Environmental Controls



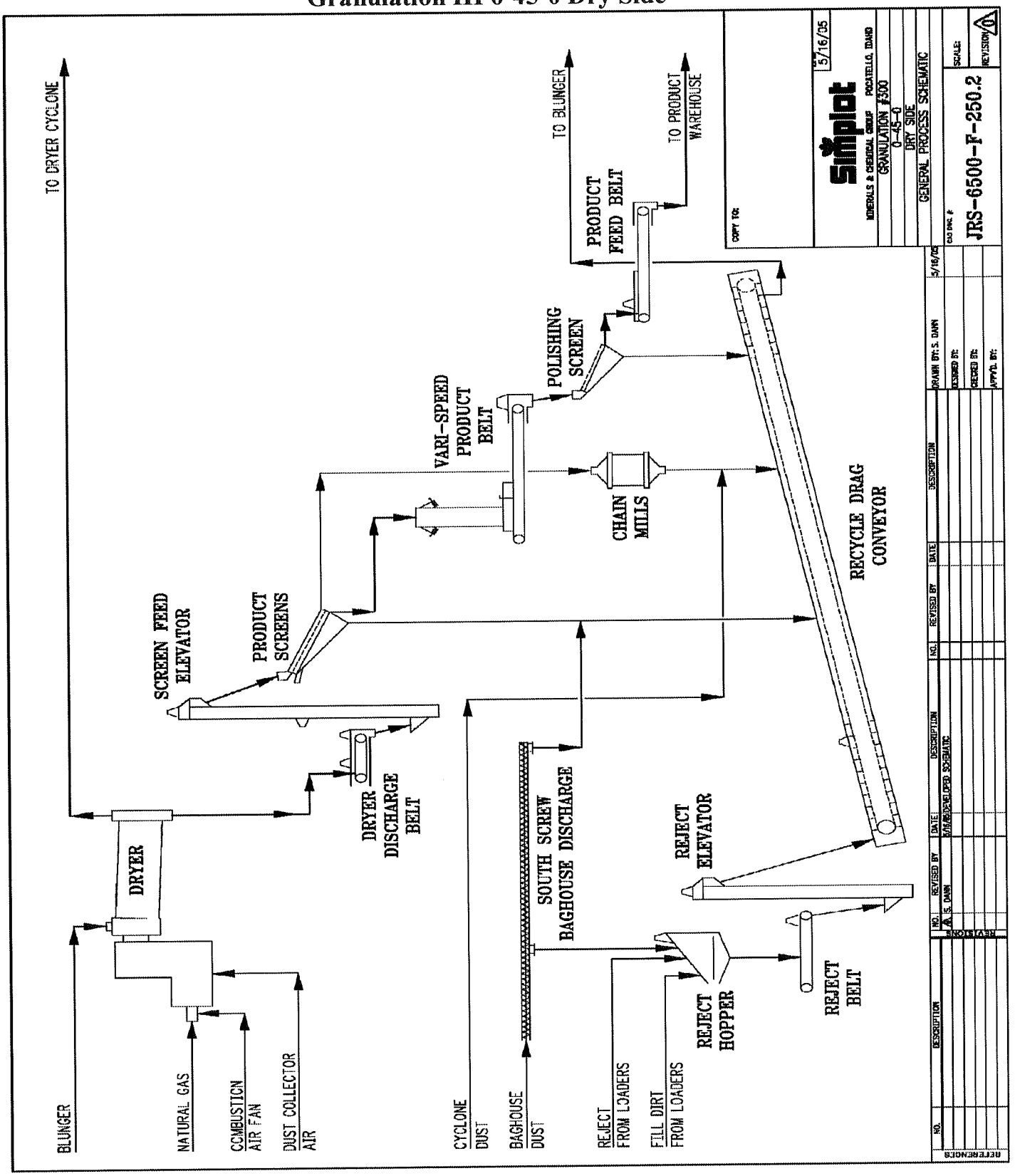
Granulation II Dust Control



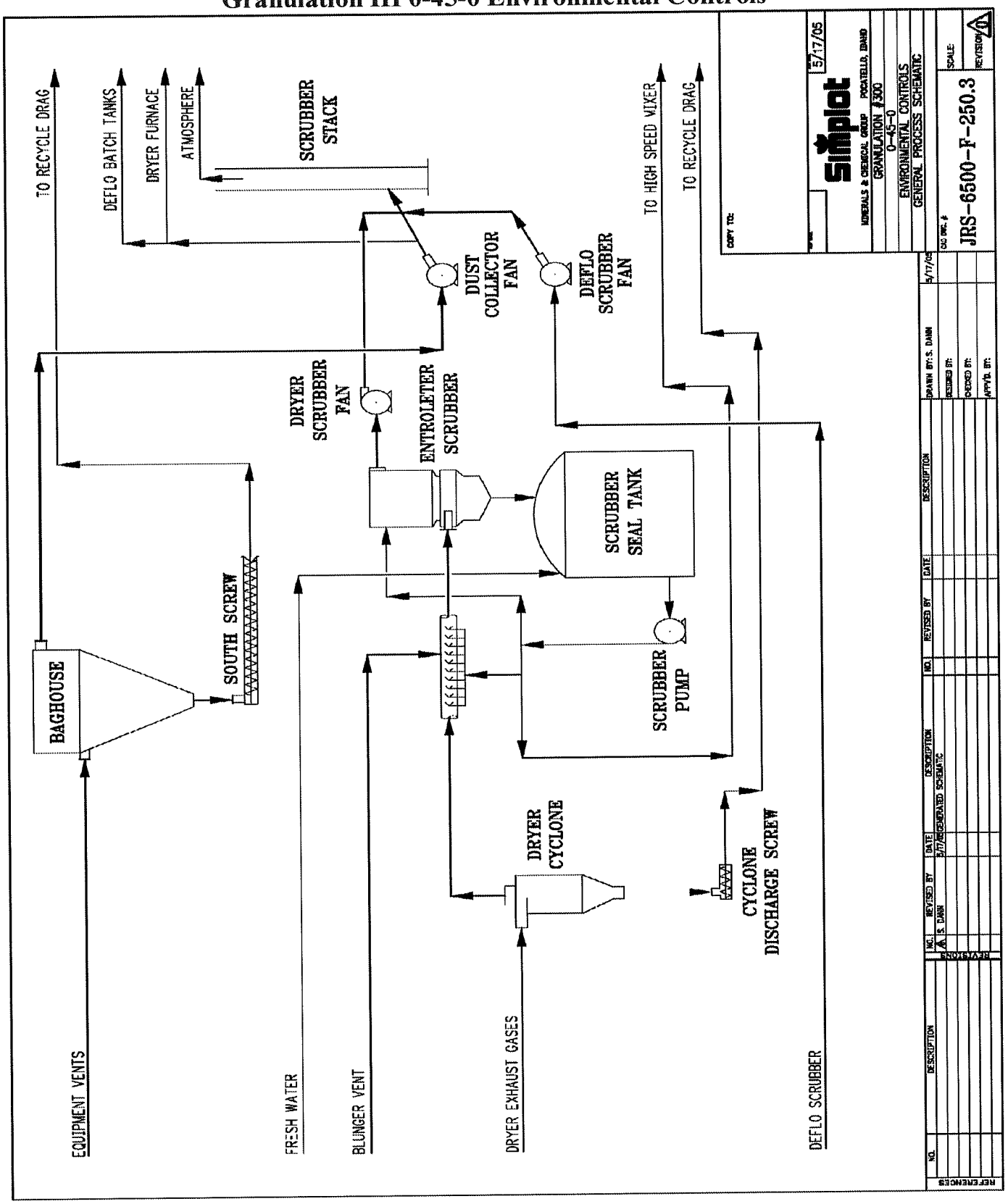
Granulation III 0-45-0 Wet Side



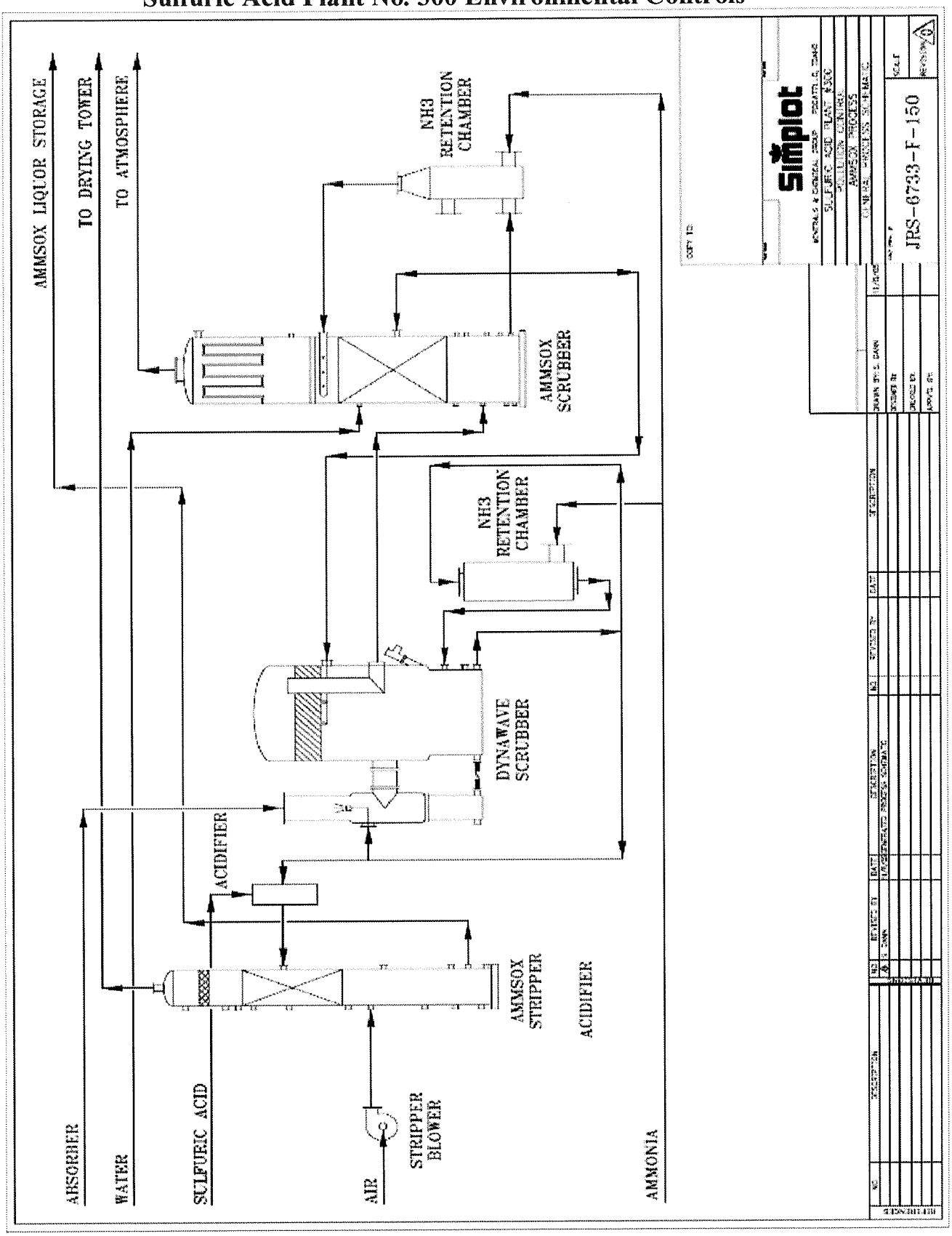
Granulation III 0-45-0 Dry Side



Granulation III 0-45-0 Environmental Controls



Sulfuric Acid Plant No. 300 Environmental Controls



Attachment 4
IDEQ April 11, 2005 Letter

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

444 Hospital Way #300 • Pocatello, Idaho 83201 • (208) 236-6160

Dirk Kempthorne, Governor
Toni Hardesty, Director

April 11, 2005

Certified Mail No. 7004 1350 0001 1692 9466

Mr. Leon C. Pruett
EH&S Manager
J.R. Simplot Company – Don Plant
P.O. Box 912
Pocatello, ID 83204

Re: Review of the superphosphoric acid plant carbon monoxide performance tests conducted by TETCO on December 9, 2004; AIRS No. 077-00006

Dear Mr. Pruett:

On January 7, 2005, the Department of Environmental Quality (DEQ) received two carbon monoxide test reports for the superphosphoric acid (SPA) plant operated by J.R. Simplot Company at the Don Plant. One test was conducted on the outlet of the primary control scrubber and one test was conducted in the ductwork following the oxidation process NOx scrubbers (extended absorption scrubbers). The performance tests were conducted on December 9, 2004. The purpose of the tests was to satisfy Tier I Operating Permit No. T1-9507-114-1. A protocol was received by DEQ on March 12, 2004 and a protocol approval letter was issued on May 6, 2004. The test report cover letter explains that CO tests were conducted at two different locations of the SPA plant because there was some confusion created in the Tier I permit about the appropriate location to test emissions to demonstrate compliance with the emissions limit.

Tier I Permit Condition 15.15 states:
"On or before December 31, 2004, the permittee shall either conduct a compliance test to measure CO emissions from the SPA primary-control scrubber stack utilizing a pollutant-specific method promulgated by the EPA, a DEQ-approved alternative, or use DEQ's emission estimation methods used in the analysis of the "Extended Absorption Scrubber," PTC No. 077-00006, dated April 17, 1990, to demonstrate compliance with the CO limit in Permit Condition 15.3."

Permit Condition 15.3 states:
"Emissions of CO from the SPA oxidation process (emphasis added) shall not exceed 4.2 lb/hr and 18.3 T/yr." This requirement is from the Tier II operating permit dated December 3, 1999.

The December 3, 1999 Tier II operating permit contains emissions limits in Appendix A of the permit. The only emissions unit in the appendix that has corresponding CO emissions limits of 4.2 lb/hr and 18.3 T/yr is the extended absorption scrubber. There are no other CO limits in the

permit relating to the superphosphoric acid process.

The Tier I permit contains this explanation of the acid oxidation process.
"Acid oxidation - SPA is transported to an oxidation-reaction vessel where residual impurities are oxidized by HNO_3. The oxidation of the impurities clarifies the SPA and it takes on a brilliant green color inherent of phosphoric acid. **The NO_x produced during oxidation is collected, pressurized, and then extracted from the effluent stream in extended absorption scrubbers, two in series. The extended absorption scrubber effluent is finally processed through the primary control scrubber prior to discharge to the atmosphere** (emphasis added)."

Your January 7, 2005, SPA test report cover letter explained that the primary control scrubber receives gaseous streams from a number of sources that contain carbon monoxide in addition to the carbon monoxide that comes from the oxidation process/extended absorption scrubbers. You go on to state that the primary control scrubber was installed in 1999 as an additional pollution control device to control fugitive emissions from the SPA area. The project collected gases from the hot wells, evaporators, cooling tanks and other sources and routed them to the new primary control scrubber for the purpose of fluoride removal.

It is clear from reviewing the Tier I operating permit and the underlying Tier II operating permit that the 4.2 lb/hr and 18.3 T/yr carbon monoxide emissions limits apply to emissions from the extended absorption scrubber that controls emissions from the oxidation process. The Tier I permit incorrectly required an emissions test of the primary control scrubber to determine compliance with the extended absorption scrubber emissions limit.

Based on a review of the submitted test reports, DEQ has determined that the EPA Method 10 tests on the oxidation process extended absorption scrubber and SPA primary control scrubber demonstrated compliance with the testing and reporting requirements contained in Tier I Operating Permit No. T1-9507-114-1. DEQ accepts the testing as a demonstration of compliance for these emission sources when operated in accordance with the Tier I permit. No further CO testing of the superphosphoric acid process is required during the permit term. Test data is provided in Table 1.

Table 1. Superphosphoric acid plant CO emissions.

Test location	CO Emissions Rate (lb/hr)	CO Emissions Limit (lb/hr)	P_2O_5 Equivalent Production Rate (T/hr)
Post - extended absorption scrubber	1.8	4.2	43
Post - primary control scrubber	4.9	None	43

The average production rate of P_2O_5 equivalent acid in the SPA oxidation process during emission testing of both the extended absorption scrubber and the primary control scrubber was 43 tons per hour. The extended absorption scrubber pressure drop was 7.0 inches H_2O during the test. The primary scrubber pressure drop was 4.5 inches H_2O and the scrubber liquid flow rate

was 63 gallons per minute during the test. The pressure drop and flow rate of the primary scrubber were within the current allowable ranges set by MACT testing, which are 0.9 – 10.9 inches H_2O and 58 – 87 gallons per minute, respectively.

Thank you for testing emissions from both the oxidation process extended absorption scrubbers and the primary control scrubber after identifying the error in the permit. Providing emissions data for both points in the process allows DEQ to gain a better understanding of plant operations and related emissions.

Please call me at (208) 236-6160 if you have any questions regarding this performance test review.

Sincerely,

Rick Elkins
Air Quality Analyst

c: Zach Klotovich, Technical Services Division
Air Quality Stationary Source Program File
PRO Source File

J.R. SIMPLOT COMPANY P.O. BOX 912 POCATELLO, IDAHO 83204
(208) 232-6620

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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

AGRIBUSINESS

Certified Mail # 7004 1350 0005 3579 3495

August 11, 2009

Mr. Mike Simon, Stationary Source Program Manager
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706

RE: REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT
Facility ID No. 077-00006, J.R. Simplot Co., Pocatello Tier I Operating Permit

Dear Mr. Simon:

While preparing our Semi-Annual Monitoring Report for our Tier I Permit, J.R. Simplot Company noted that condition 2.9.2.1 contains a requirement that is different from the underlying rule cited (IDAPA 58.01.01.133.01.a). Condition 2.9.2.1 states:

> *A prohibition of any scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory and/or Wood Stove Curtailment Advisory have/has been declared by DEQ.*

IDAPA 58.01.01.133.01.a contains the following language:

> *No scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory and/or Wood Stove Curtailment Advisory has been declared by the Department* ***within an area designated by the Department as a PM-10 nonattainment area,*** *unless the permittee demonstrates that such is reasonably necessary to facility operations and cannot be reasonably avoided and the Department approves such activity in advance, to the extent advance approval by the Department is feasible. This prohibition on scheduled startup, shutdown or maintenance activities during Advisories does not apply to situations where shutdown is necessitated by urgent situations, such as imminent equipment failure, power curtailment, worker safety concerns or similar situations.* [Emphasis Added.]

On July 13, 2006, the Environmental Protection Agency (EPA) approved the Portneuf Valley, Idaho PM-10 attainment and maintenance plan which was submitted to EPA on June 30, 2004. Portneuf Valley's status changed, and as a result, the permit condition became more stringent than the rule. Therefore, Simplot respectfully requests an administrative modification to the J.R. Simplot Co. Tier I Operating Permit to change condition 2.9.2.1 to mirror the requirement found in IDAPA 58.01.01.133.01.a.

As required by IDAPA 58.01.01.381.02, we are providing the following information:

i. This is a REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT
ii. This is a request to modify permit condition 2.9.2.1 to reflect the IDAPA 58.01.01.133.01.a.
iii. Permit condition 2.9.2.1 is the affected condition.
iv. The applicable requirement is still IDAPA 58.01.01.133.01.a.

If you need additional information or would like to discuss this, please contact me at (208) 234-5470.

Sincerely,

Kirk B. Adkins
Environmental Manager

Enclosures

cc: Sheila Bush, J.R. Simplot Company
Alan Prouty, J.R. Simplot Company

Excerpts from the Rule and Tier I Permit

133. STARTUP, SHUTDOWN AND SCHEDULED MAINTENANCE REQUIREMENTS.
The requirements in Subsection 133.01 shall apply in all cases where startup, shutdown, or scheduled maintenance of any equipment or emissions unit is expected to result or results in an excess emissions event. The owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with all of the requirements of Subsection 133.01, as well as the development and implementation of procedures pursuant to Subsections 133.02 and 133.03 as a prerequisite to any consideration under Subsection 131.02. (4-5-00)

01. **General Provisions.** The following shall pertain to all startup, shutdown, and scheduled maintenance activities expected to result or resulting in excess emissions: (4-5-00)

a. No scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory and/or a Wood Stove Curtailment Advisory has been declared by the Department within an area designated by the Department as a PM-10 nonattainment area, unless the permittee demonstrates that such is reasonably necessary to facility operations and cannot be reasonably avoided and the Department approves such activity in advance, to the extent advance approval by the Department is feasible. This prohibition on scheduled startup, shutdown or maintenance activities during Advisories does not apply to situations where shutdown is necessitated by urgent situations, such as imminent equipment failure, power curtailment, worker safety concerns or similar situations. (3-20-97)

[1]

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T1-040313				
Permittee:	J.R. Simplot Co. - Don Siding Plant	**Facility ID No**	**Date Modified**	November 8, 2005
		077-00006	**Original Issue Date:**	December 24, 2002
Location:	Pocatello, Idaho		**Date Expires:**	December 24, 2007
The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.				

2.9.2.1 A prohibition of any scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory and/or a Wood Stove Curtailment Advisory have/has been declared by DEQ.

[IDAPA 58.01.01.133.01.a, 3/20/97]

[1] Please note the header on most pages of the permit indicates this is a Tier II Operating Permit; however, all other references in the document indicate a Tier I Operating Permit. We believe the header contains a typographical error.